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MEDICAL EDUCATION AND STATE LICENSE.

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(Concluded from page 119.)

THE STANDARD OF EDUCATION.

During the last twenty-five years, the standard of medical education has been elevated in a remarkable manner, and to an altitude undreamed of by educators twenty-five years ago. I need not specify the change in methods of teaching, or the changes in the sciences taught. It is enough to say that the difference in both, during the time mentioned, is greater than the likeness.

But there is still a cry for a still higher standard. We cannot regard the demand of those people who demand that the standard of education shall be so high that no man can get over it, or if a man does succeed, he shall come down on the other side a physical and mental wreck. That this is already the standard in some places is known to all, and instances of insanity and death from overwork among medical students, and persons trying to circumvent the diabolical inventions of the modern civil service inquisitorial commissions are also known to all. The fault of these things is very likely because the examiners have no correct conception of the nature of education, or of what an examination ought to be. Methods are ignored, and general laws in science ignored; but questions relating to special facts, which have no natural or mental relation to each other, and which educated men carry in their libraries, and

not in their memories, are made the burden of these inquisitorial tormentors.

It is evident that the people who are demanding a higher medical education, mean an education of this character. What the teacher lacks in actual, verified, general science to teach, must be supplied by a year or two of cram, and this cram is made up by "storing the mind" with disconnected specialties in science, which the student must be prepared, by a strain of memory, to shoot off at the will or fancy of an examiner who, very likely, has recently copied them out of a text-book, and visits the text book again to compare the answers to the special conundrums.

Education is at its highest standard in medicine when enough special facts of each scientific subject are taught to illustrate the general law under which they are classed, and the proper relations are understood, and the methods by which these facts and others of similar character are understood. There is no more need of a medical practitioner remembering all the special facts in medicine and the allied sciences, and being able to carry the answers in his memory, than there is that a lover should know the definition of every word in Webster's unabridged, and be able to repeat a whole volume of a selection of household poetry when he pays court to his mistress.

A further fact to notice in the nature of education is that the teaching should be complete as far as it goes, and the truth being taught and learned that "verification is the test of scientific truth," those propositions only which are thus verified should be taught, the methods of verification fully understood, and the hypotheses, as a rule, given the go-by, except to refer to them as samples for

which no verification is yet discovered. Now, it may be said that "medicine" proper is not yet overburdened with verifications. The causal antecedents of most diseases are unknown; those which are known are easily learned and taught, and certainly those which are not known ought never to be made the subject matter of a student's examination to determine his qualifications in the divine art of healing.

In view of these facts, and in view of the physician's relations to his art and his living, all of which must be considered, I think the question practically considered, of what should be the standard of medical education, can be answered, and I will attempt it as follows:

The standard of education in medicine, of the nature and character that I have enumerated, must be high enough to enable the physician to compete with other physicians, and if other things are equal, to make a living by "practicing his profession."

It makes no difference what may be our æsthetic ideals of education and morals, and of the physical, mental, and moral nature of a man, our practical estimate of the standards of all must be based upon the laws of life and the methods of getting a living. There are no physiological or social phenomena, but when we analyze them down to bed-rock, bring us face to face with the "final design of the Creator," as well as the complete or not complete result of evolution; and we find that we cannot understand them or express them scientifically in any other terms than those given by the laws of life, and getting a living. The young man who visits his girl may or may not have the definition of every word in Webster's dictionary on his tongue's end, just as it is in the book, and may or may not be able to quote from his heart all the love selections from the poets, but he may secure his girl all the same, and this fundamental law of life is then fulfilled. And, as I observe it, the young or old doctor who attends a case of midwifery may or may not know or remember how to describe the "fetal circulation" and the "blood relationship" of the placenta to the uterus, and yet the labor may terminate, not only with safety to the "old man," but with a happy mother and living child, and glory and pay to the doctor.

Another feature of medical education is the impossibility of educating all people to an equal standard. This fact is a corollary of the truth that all brains are not equal, or, at least, are not all alike; there are differences, especially relating to present methods of education, but whether these

differences represent so many shades in degrees of excellence, is not so clear. I think the differences are quite as likely to represent shades of failure in the methods of education, and the knowledge of how to impart knowledge on the part of educators. I do not think that our most successful generals, scientists, ministers, doctors, lawyers, business men, inventors, or any other class of men, ranked so high in college examinations as those who were less successful after they left school and began the business of living and earning a living; and I am quite ready to declare that, measured by the practical laws of life, and what is required of a man to compete with his natural rivals in order to live, the result of an "examination" of his qualifications, as these examinations are usually conducted, whether by State boards, college faculties, or civil service inquisitions, is no possible criterion of the man's ability to make a living for himself and do his duty to his competitors at the same time—partly for the reason that education is too much a cram, and an examiner always goes on the principle that it is altogether a cram, and also acts on the principle that all men are alike, in memory, will, intellect, and emotion, as well as physical hardihood. The examiner, having only one rule of conduct, and the teacher having a single method and but one idea of the subject of teaching, will fail to adapt themselves to their students, quite as often, I think, as the students will fail to adapt themselves to them. The fact is that the most difficult mental feat on earth, or in the domain of mental activity, is to determine and judge of a man's ability to practice physic or make a living in any other way by asking him questions. Better wait and see. Colleges are driven by outside pressure into the cram methods of education. Prizes are yearly offered for superior excellence in special departments, and general scholarship, the superior excellence to be determined, of course, by examinations; and very often the prizes are all carried off by one or two students. The reason of this, it must begin to dawn upon the minds of prize-givers, is that though the prize-winners may have the formation of brain and mind which corresponds nearest to the teacher's methods, yet they do not always turn out the best educated and the best adapted to the real work of living and earning it by professional activities.

The teacher who can adapt himself to the different kinds of pupils, and their different mental faculties, will be most successful; and the examiner who can so adapt himself, is least to be pitied.

By the rules of prize-giving, I think it generally happens that the prize-winner is not the man who is best adapted or educated to make his way in the world, but he is best adapted to fill the requirements of an examination which taxes no faculty but memory of words, or special facts, which stands next to words; and I believe that when cram ceases to be the method of education, prize-giving will cease to be a custom; for it can never be a reward of industry so much as it is a reward of inheritance of superior mental ability—for the reason that all men are not born intellectually equal, and no industry can fill up the gulf between them.

From the tenor of remarks of the critics who wish to throw medical education into politics, one must conclude that these people not only suppose that all people are born intellectually equal, but must be educated by the same arbitrary methods, and examined by the same standards, and must be equal in their ability after school days to make a living. We find differences among people in all callings and all grades of life. Nations differ, races differ, people in the same occupations differ, people in the same townships differ, and people in the same families differ as greatly as any people. It is difference in people that makes society, and civilization, and social laws, possible and practical. These critics also think that the student must be graduated, or let out of a college, an old and experienced doctor. Education is a matter of a life-time. The song of the pessimist is that he no sooner learns to live than he must die. People are born helpless—they are not born giants, or athletes, or savants. Gestation has simply started the process of growth, and carried through to a great extent the process of differentiation of the ovum. Education is something similar in methods and intention. Education teaches or learns methods of growth, but the man must grow in the directions given him by his education all his life. The success of self-educated men, compared with college men, doubtless depends somewhat upon the faulty methods of colleges. But the critics are also prescribing methods for the colleges, and a notable requirement is the "preliminary examination," which has lately been imposed or adopted. I have little to say on this subject, for the reason that it is such a pet of the people who are not teachers in colleges, and are no longer students, in the college sense at least; but, perhaps most of them have learned their "preliminary education" since leaving college, and believe the need of it to be a long-felt want. The critics who prescribe this measure for colleges, generally preface their re-

marks by the "complaint" which I have quoted as the basis of this article. They say the profession is overcrowded, and therefore a "difficult literary preliminary examination" should be imposed as a method for colleges, and expressions generally follow this suggestion which lead us to expect that the measure will lessen the number of matriculants.

Now, a "difficult literary examination" must mean an examination in Greek and Latin, a prescription which will certainly be resented by teachers and students. In these days no rule of ethics or imposition of "health boards" can compel a man to study "classics" before being allowed to enter a medical college. A preliminary examination is, however, imposed by certain alleged educational authorities, and is adopted by many colleges; but to my mind the wisdom of the measure reaches no desirable end. It cannot be made to cover the classics, but can only cover reading, writing, and spelling, a little mathematics, and possibly a little physics. No one will or can gainsay that a preliminary education in science is a benefit to a man who enters a medical college, but I believe that a classical education is, if anything, an injury to him. The question of classical education is just now a hot one, and the probability is that it will grow hot enough to consume the wretched old superstition in educational methods. A scientific education helps a student in the allied sciences of medicine, because it is fundamental, and teaches by the method of verification as the test of propositions; and this method is of inestimable value to a medical student, and if he has learned scientific experimental methods, and has learned to reason inductively from verified facts to general laws, he has already learned what he must learn as a medical student, and this sort of a preliminary education is therefore all right, because it is not so very "previous" after all, but is a medical college method, learned by the student before he enters college.

The selection or rejection of students for this reason, however, is arbitrary and unjust. The Grecians were all athletes, and decided that for state reasons, and æsthetic reasons, no Greek should live who was not an athlete. Notwithstanding this rigid law, there were differences in the heroes of the Olympian games and in wars; though they were all brought up by the same trial of the "straight edge." The Greek made a political matter of it, and imposed a "preliminary examination" upon babies before they were allowed to enter childhood, or have their swaddling clothes. If the political commission de-

cided, after their examination, that the child might grow up an athlete, and do honor to the profession and the æsthetic taste of the Spartan idea of things, then the child lived; if not, then the child failed to be an athlete very early in life; and yet, many Spartans failed to become Olympian heroes.

It is notorious that preliminary or literary degrees are scarce among physicians. There appears to be no natural connection between literary study and professional excellence. I am acquainted with a graduate of a literary college, who was even tutor in Greek in his college, and who speaks German and French fluently, and yet is not successful, professionally, in any distinguished manner; and I know another physician who is wealthy for a doctor, and made his own property, who has a large surgical practice, and who cannot solve a problem having fractions, or state a rule of grammar, and who, in making out official papers as surgeon of a railroad, spelled Kansas with two C's.

I mention these cases as samples of two kinds of doctors; and I am willing to admit that the classical education of one adds to the "dignity of the profession," but I claim that the illiteracy of the other does not appear to hurt his practice, or inhibit his capability of making a living.

THROWING PHYSIC TO THE DOGS.

By this caption I mean turning the matter of medical education over to politicians as the remedy for overcrowding.

Medical societies in some States are making strenuous efforts to divorce medical teaching and license-granting. It appears by bills introduced into legislatures that these men propose to license physicians by political methods instead of educational methods. The political machine is to appoint a board, whose duty it shall be to examine all candidates from colleges for diplomas; and if any diplomas are to be granted, the State will decide who are qualified to hold them.

Now, provided this thing could be run as these projectors imagine, let us look first at the unfair discrimination. It is supposed, of course, that old and young doctors, who are qualified by diplomas when the law goes into effect, will not be subject to an examination by this board; but the man who is later in the field must submit to this discrimination by the State. Obviously the *animus* of this proposed law is that the profession is overcrowded, and politics will not favor the young brood to the extent that the teachers will. The projectors of this law are no less foolish than wicked. They have no right to impose greater

restrictions upon others than were imposed upon them; for all men in civilized countries have equal rights to make a living as pleases them best, while the political methods of obtaining diplomas are so different and so easy compared with the educational methods, that the foolishness of this proposed law must be apparent to any person who has any experience with political methods.

This law, in part, is already in effect in Illinois, and has been a working factor of the Board of Health for several years. The law gives the Board power to grant licenses to persons independently of educational methods. The Board does not teach medicine, it simply examines. The result is that many students have been taken out of colleges, who were in the first or second year of study, and granted license by the State, by virtue of a "certificate of examination." It is a pity that the teachers in colleges have not discrimination to know that one student may learn as much in six months as another in three years; but when the State says this is a fact who can dispute it?

On the other hand some 1,700 "doctors," who had not diplomas, and who were afraid of the examination, or were refused examination, left the State—so it is claimed. Again, not a few druggists who had prescribed over the counter for ten years previous to the law, were licensed as physicians by the Board: and why shouldn't they be? for the political machine this year appointed a druggist—no doubt a very able druggist and politician—to be a member of the State Board which regulates medical education and practice and preventive medicine through the State.

It is generally conceded that reform in public social institutions depends upon their being taken out of the political machine. The public schools are trying to get loose from politics. The insane asylums are making a similar effort. In this country reform in any public abuse means that politics has let go.

Why should other colleges, Greek and Latin schools, not be subject to politics? Perhaps it will be the last resort of the adherents of the classics to throw these colleges into politics. While the fashion is rampant, why should politics not control the theological and law schools? Theology would like closer relations to the State, and no doubt lawyers could engineer the politics of the State so as to make their graduating briefs even briefer than they are. It is apparent that not a few of the medical men who are, if not many who are to be, need the protection of the State, but the protection should be given by an asylum for the feeble-minded.

When this law goes into effect, the State Board of Examiners will be appointed, of course, by the political authorities, and will be a wheel in the political machine. Its methods will be political methods. Of course their qualifications will be political, for who would be competent to examine them? The Board will represent one political party, and perhaps three persuasions in medicine. To pass such a Board, by examination, will require greater flexibility in the minds of the candidates than the text of Holy Writ; and it must be admitted that there can be found no evidence that when a medical student goes before this Board for examination, the Board is more qualified to examine the student than the student is to examine the Board.

Separation of the teaching power, and licensing power, will soon do away with teaching power, nearly or quite, because the methods of obtaining diplomas will be political methods—and can any of the gentlemen who are striving to bring this law about imagine that such measures will lessen the overcrowding of doctors? The educational methods of getting medical diplomas are well known, but let us compare these methods with what will be the method in politics. Judging by the record in Illinois, if the applicant for license has political influence, and has attended one term in a medical college, he will be made happy by the receipt of his political license to practice medicine.

THE TRUE RELATION OF GOVERNMENT TO INDIVIDUALS.

All people will do what they can to qualify themselves to make a living; but very often the duty of all these people to others must be under the controlling power to shape their conduct so that each can have an equal chance. Manifestly there is a sharp line of demarcation, which separates personal liberty from the control of government. The judiciary and civil officers interfere to prevent or punish crimes of people against each other; but if a man wants to open a grocery store in a town which is already overcrowded with grocery stores, he is not obliged to get permission from the judge, nor can other grocery-keepers get out an injunction to restrain him, nor would these grocery dealers even think of carrying the thing into politics.

Now, the case is like this in theology, law, medicine, or any other trade, occupation, or calling, by which a man tries to make an honest living. "Boards of Health" are necessary to take care of unlawful conduct among colleges and doctors—those who buy or sell diplomas, or practice without diplomas; but a Board has no more busi-

ness with a doctor who has a diploma, or with a college which is up to a required standard, than the sheriff has to do with a man who buys a horse, and pays the contract price.

Ministers do not ask for political control in education or faith. Lawyers would certainly never submit to an examination as to their qualifications by a board of politicians. Civil engineers consider themselves rather above political squabbles. Inventors never think of going into politics to prove their liberty or qualifications as inventors; and the fact is that the people of no profession or calling have ever stooped so low to conquer, or be conquered, as the medical profession, which is now trying to throw physic and physicians to the dogs.

RECURRENT IRITIS AND ITS RELATION TO CHOROIDAL DISEASE.

BY S. D. RISLEY, A. M., M. D.,
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(Concluded from page 116.)

Notwithstanding these difficulties, Schnabel (*loc. cit.*) asserts that "the ophthalmoscopic examination of individuals suffering with acute iritis revealed, no matter what the cause might have been, most frequently diffuse retinitis." He appends a history of twenty-three cases of acute iritis thus examined. Five of the cases were diagnosed as having both retinitis and hyalitis. With reference to this group of cases he states that: "The most remarkable fact demonstrated by the foregoing table is the *almost constant existence of retinitis with acute iritis*"—although he acknowledges that in the vascular system of the retina (in iritis), we do not see any remarkable changes. Among sixteen eyes having specific iritis, he found only one normal retina; and among ten having non-specific iritis, only three.

However strongly we may feel inclined to call in question the perfect accuracy of a diagnosis of diffuse retinitis, made through a muddy vitreous humor, particularly when there are no "remarkable vascular changes" to verify the retinal complication, still it must be acknowledged that it is comparatively rare to find an eye affected with acute iritis that has normal sharpness of sight, or in which the media are found transparent. The existence of opacities in the vitreous are, I think, by most men, accepted as evidence of the presence of choroïditis. Schnabel (*loc. cit.*), however, does not accept this dictum, but insists upon ophthalmoscopic verification of the choroidal disease for a diagnosis of its presence, and insists upon pri-

mary inflammation of the vitreous itself. In his study of twenty-three cases of acute iritis, therefore, he found "most frequently retinitis, comparatively seldom the presence of changes in the vitreous, and most rarely anomalies in the choroid."

The anatomical relations of the iris to the uveal tract, of which it is in fact an extension, would lead us *a priori* to anticipate a frequent connection between the diseases of the one and the other. Indeed it was hardly to be expected that an acute inflammation of the iris could be rigidly confined to that important structure, lying as it does in such close proximity to the ciliary body and muscle, enjoying the same bloody-supply. But it is equally probable that diseases affecting the choroid proper or ciliary region, might also, by the simple fact of continuity of tissue and blood-supply, attack the iris secondarily, or simply by a gradual process of extension forward. That such extensions of inflammation can and do occur has, I think, been demonstrated by the foregoing cases. It receives further confirmation in the following case, which will serve also to demonstrate the serious importance of this disease and the necessity for prompt and well-directed treatment.

There can be no question of the great importance of preventing the adhesion of the iris to the capsule, for however little influence the attachments themselves may have over the production of subsequent attacks of iritis, there can be no doubt as to their baneful influence when they by frequent repetition finally lead to exclusion of the pupil; this will be painfully illustrated in the history of Case 3. I have already presented to the Society the early history of this case, as one of a group illustrating the history of secondary glaucoma. I now repeat it more in detail with the subsequent development:

Case 3. Mrs. D., *æt.* 46 years, consulted me August 17, 1881, her vision being so seriously at fault that she was led into the consulting-room by her husband. She gave the following history: Her first eye trouble was experienced in March, 1880, when she quite accidentally discovered that vision in O. D. was impaired. The impairment steadily progressed without pain or other symptoms until the following July, when she was attacked with violent pain in the right eye, which spread over the entire right side of the head. The eye was red, tender to the touch, photophobia so intense, and pain so severe, that for eight days she was forced to remain in bed in a dark room. Her attendant was a homœopathist.

The impairment of vision increased rapidly after this attack; there were frequent subacute

exacerbations which simply added to her constant discomfort, and were characterized by an increased dimness of vision, exaggerated tenderness, and injection of the ball. The left eye had given no signs of trouble until April, 1881, about one year from commencement of impaired vision in the right. She then noticed diminished acuteness of vision, which steadily progressed up to the present time, but with no evident onset of inflammation. It had had, however, frequent attacks of redness, attended with periorbital pain, dread of light, soreness of the ball, etc. Mrs. D. to all appearances was in perfect health; she had married late in life, and had enjoyed uninterrupted health; had never been pregnant: the menstrual function had been regularly and painlessly performed until the present month, which she had missed for the first time, and was now annoyed by alternating flashes of heat and perspiration.

In O. D.: T + 2, cornea steamy, and sensibility markedly diminished, some ciliary injection, anterior chamber shallow. The iris was atrophic and fixed; pupil 2 mm. in diameter, and occupied by a grayish-white web, and papillary margin of iris attached in annular synechia: only grayish-red light from fundus; there was no pouching of the iris; counts fingers only with difficulty and as shadows, the hand being held between the eye and source of light. Field taken with candles shows perception in temporal field only.

O. S.: Cornea also steamy, sensibility somewhat diminished, some ciliary injection, anterior chamber shallow, iris discolored, nearly annular synechia, no pouching, T + ? F. perfect, $V = \frac{2}{CC}$.

Solution of eserine sulphate, 1 gr. f $\frac{3}{j}$, relieved somewhat the periorbital neuralgia, and the steaminess of the cornea diminished, but there was no improvement in the vision.

On August 31, I did a broad iridectomy upward on the left side, and a large sclerotomy on the right, in the hope of diminishing the tension and relieving the pain, as I had no hope of restoring useful sight in the right eye. The iridectomized eye recovered slowly and with considerable reaction, while the right recovered from the sclerotomy without any reaction, and with entire relief of pain. Three weeks after the operation, O. D. white, T. n; free from pain; cornea transparent; pupil as before; anterior chamber normal; but much to my surprise V had risen to $\frac{20}{CXVI}$

and the field now taken on perimeter had extended in all directions. O. S. showed typical coloboma: anterior chamber normal; T.—; V, quantitative

perception; cornea transparent; V steadily improved in both, so that three months after operation, during which she had steadily used the weak eserine solution, O. D. $V = \frac{20}{LXIV}$. O. S.

$\frac{2}{C}$, and she visited the office without a guide.

The improvement continued until, notwithstanding occasional attacks of redness, the following September, 1882, one year from the date of operation, when there began an insidious onset of serous iritis in the sclerotomized eye, with punctate deposits on Descemet's membrane and pouching of the iris without increase of tension, and V

sunk to $\frac{15}{CC}$.

O. S. as before. On September 26 I did a broad iridectomy in O. D. upward, leaving a faultless coloboma, and liberating a quantity of yellowish glutinous fluid from the posterior chamber. The eye recovered with but little reaction, and all went well until the night following the fourth day of the operation, when she was awakened by an acute pain in the eye. The following day the anterior chamber was filled with blood. The clot slowly absorbed, the eye softened, and she gradually lost all perception of light. In a few months deposits appeared in Descemet's membrane in O. S. and without pain, V steadily failed until only merest quantitative perception remained.

During these months she suffered much from the troubles associated with the menopause, which doubtless had to do with the unfortunate termination to a most interesting pathological history.

The case furnishes wide scope for speculation regarding its pathogeny. Her failing vision at the outset was surely not iritis, but some disease of the deeper tunics, most probably retine choroïditis. The following violent attack of iritis, resulting in adhesion of the iris to the capsule, the subsequent subacute exacerbations, with the formation of additional bands of lymph, until exclusion of the pupil was reached; then the appearance of secondary glaucoma, with the increased tension of the ball, the cupping optic nerve, the contracted field of sight and almost total blindness; the rapid relief of all the symptoms, by simply incising the angle of the anterior chamber, to be followed by widening of the field and a large restoration of sight, notwithstanding the fact that the gray film still covered the pupil and the iritic adhesions remained: furnishes a picture of disease that cannot fail to interest, although in many respects it baffles a satisfactory

explanation. Had the early treatment been so conducted as to prevent the formation of the synechia, until such time as the primary inflammation of the deeper tissues should subside, there is no question but that the ultimate result would have been very different. For in that case the secondary glaucoma would doubtless have been omitted from the picture of disease.

In O. S. the synechia was not annular, so that there was still some small communication between the posterior and anterior chambers. The result of the iridectomy in this eye was disappointing, as compared to the brilliant, though unexpected, but unfortunately temporary, result in the right eye.

The rapid improvement in O. D. can probably be explained by the relief of the glaucomatous tension afforded by the sclerotomy. Notwithstanding this, the choroidal disease slowly progressed toward a fatal issue. It is to be regretted that iridectomy had not been done instead of sclerotomy. The only excuse was that the eye was regarded as hopelessly blind, and the operation was designed to relieve the suffering of the patient.

In the light of comparatively recent investigations, the progress of the disease from the right to the left in the first instance, and the onset of serous iritis about three months after the loss of O. D., furnishes a very interesting history in the light of recent investigation into the pathology of sympathetic irritation.

If in these remarks I have succeeded in making clear that iritis is more than an inflammation of that delicate membrane, I shall feel that I have accomplished my purpose. I do not wish to assert that all cases of iritis begin in the choroid and ciliary organs, but do assert that many exist only in common with inflammation involving the deeper structures, and that their treatment, therefore, should be conducted with this fact in view.

There are many cases in which no evidence of inflammation of the retina or choroid can be gained as having preceded the attack of iritis, where, nevertheless, after the subsidence of the iritis, the deeper trouble was revealed. That both may have been due to a common cause, or that the trouble simply extended backward by virtue of anatomical relations, cannot be denied. But that even in simple idopathic iritis, attacking the iris primarily, there is also profound congestion of the entire choroidal tract, is unquestionably true, and it would be folly to deny that this congestion might, under favoring conditions, *e. g.*, existing dyscrasia, pass over into a pathological state, involving both choroid and retina.

HOSPITAL REPORTS.

A CLINICAL LECTURE DELIVERED AT THE
HOSPITAL COLLEGE OF MEDICINE,
LOUISVILLE, KY.

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(Reported by ALLEN KELCH, M. D.)

Impaired Sight as a Ground for Pension.

GENTLEMEN: As I have frequently had occasion to examine claimants for pension on account of injuries or diseases alleged to have occurred in the course of military or naval service, I have requested two recent applicants to come to the clinic to-day, inasmuch as both of them illustrate important points to be considered both in the determination of the liability of the government and the precise nature and extent of the disability. Grave responsibilities devolve upon those who are called upon to examine applicants for pension, and I believe the two cases I shall present to your consideration to-day are especially worthy of your careful study.

The first case I shall present is Mr. F—. He is an Irishman, simple in manner, and apparently honest in purpose. The first time I ever saw him he was suffering from ulceration of the cornea, and from an aggravated form of the disease which you now see affecting the margins of his eyelids, a parasitic affection of the hair-follicles, denominated *tinea tarsi*. Like Leah, the daughter of Isaac, he has lost all the lashes from the left upper lid, and the greater portion of those from the right. He is bleary-eyed, in that he has lost the lashes, and that the margins of the lids are swollen, red, and ugly. When Jacob had labored seven years for Rachel, he was given Leah because she was bleary-eyed and ugly. Ophthalmic medicine in that day was evidently not so well understood as it is at present, and it may not be inappropriate to add that it was not as well understood in 1867, when I first saw this man, as it is to-day. You observe that he squints; that the left eye appears smaller than the right; that the left eye is now of no particular use, because the extensive opacities of the cornea existing in former years obscured the vision by preventing the entrance of light; and the eye being of no use, has accordingly become convergent. In the right, corneal ulceration has at times appeared, but fortunately it has never extended so deeply as to involve the proper substance of the cornea. Consequently, vision equals $\frac{2}{3}$ in this eye, and he is able to read the lines in his prayer-book, though he says he cannot read the newspapers. Although I have known this man since October, 1867, I never knew until a few days ago that he is a claimant for a pension. I have certified to my knowledge of his afflictions from the date of my first service to him to the present. He says he was a soldier in the late war, and that in 1863 his regiment was marched into Louisville to take charge of the provisions which were stored in the warehouses along the river front, and piled up in great heaps upon the levee covered with tarpaulins. He says he was accustomed to go home

regularly when off duty, and that when he heard that General Bragg was coming into Louisville, he rushed home and told his family to seek a place of safety; and returning to his post of duty, remained there day and night without food, guarding the government's provisions. He says he looked so long and anxiously for General Buell to come and give him relief that he strained his eyes, and they have been sore more or less ever since. He now concludes the government ought to pay him a pension for the sacrifice of his vision.

The question arises, ought the military service, with its exposures and vicissitudes, be held fairly accountable for the damage to Mr. F.'s vision? Surely the *tinea tarsi* was not contracted through the fault of the government, although it is true the long-continued exposure in doing guard duty, with insufficient rations, may have debilitated his system and crippled his nutritive functions so as to have laid the foundation for this mischief. It is, therefore, a matter of responsibility and extraordinary difficulty to determine how far the government is liable. Leaving that, however, to the authorities in the Department of the Interior at Washington, I have been obliged to say to what extent this man is incapacitated from performing manual labor. He tells me his occupation is that of a stone-cutter; that he can no longer see the lines upon the stone, and that he has never been able to do so since the war; that he could never dress the stone such as is used for curbing the sidewalks in our streets, and that he is obliged to depend upon common labor, the reward for which is not more than one-fourth that allowed to a stone-cutter.

It would therefore appear that this man should be allowed three-fourths the government rating in the pension allowances, as he is by his affliction deprived of the power of earning more than one-fourth at manual labor what he formerly earned at cutting stone.

The next case I have to present is that of J. M., 44 years of age, tall, well-built, and of good address. He claims relationship with some of the most distinguished families in the country. He says he was a non-commissioned officer in the United States army in the volunteer service, and that in the forced marches the great fatigue to which he was subjected during the military campaigns in the South, his sight failed him. He is, in consequence, now an applicant for a pension. By reference to my notes, I find that my first acquaintance with this man began in 1872, when he called to be examined as to the state of his vision, and for me to note the extent of its impairment. I then made affidavit as to his condition, and took notes of his case. Whether this ever went to Washington to the Pension Bureau I am not able to say. He comes now, however, for the third time—this time in obedience to an order from the Commissioner of Pensions, who has sent him to me for examination as an expert. This time I am requested to make a particular kind of examination, with the view of determining not only the nature and extent of the impairment of vision, but the probable cause of the disease which gave rise to it.

He is a man well-nourished; he has white scars in the arches of the soft palate, particularly upon

the right side near the base of the uvula; he is deaf in one ear; the iris in the left eye has been inflamed, and the pupil is now adherent at two points, viz., below, and at the temporal margin. These attachments of the iris to the capsule of the lens have no other significance than that the iris has been at some previous time inflamed. With this eye he is able to count fingers only at ten inches. Ophthalmoscopic examination shows floating bodies in the vitreous chamber. It shows a creamy-white colored disc, with very small arteries and very small veins, the arteries being so small as to require very careful examination to find them. The marginal outlines of the optic disc in this eye are somewhat irregular, and are imperceptibly shaded off into the surrounding structures.

The right eye is differently affected; the pupil, as you see, is quite widely and uniformly dilated; particles of dark pigment adhere to the anterior capsule of the lens, which shows that there has, at some time previously, been attachments of the uveal substance of the posterior surface of the iris; in fact, he has had inflammation of the iris in this eye, though less severely than in the other. In this eye, as in its fellow, floating bodies appear in the vitreous which appear to be shreds of lymph, with here and there the remains of contracted blood-clot. The marginal outlines of the optic disc in this eye are difficult to trace. The extent of cicatricial tissue is greater here than in the other eye. A singular condition, however, is observed. One branch of the arteria centralis retinae passing upward and toward the temporal side sends out a pair of twigs which surrounds the region of the macula lutea, and a single vein just below the horizontal line appears in the disc.

It would seem that the plastic effusion surrounding all the other branches of the arteria centralis and all the corresponding veins had been sufficient to produce closure in the vessels whilst this one twig alone remains to carry the blood-current. His vision in this eye equals $\frac{2}{3}$, with an extremely limited field of vision, covering an area of but fifteen degrees from the fovea centralis toward the temporal side and ten degrees toward the nasal side, with a fraction less than ten degrees above and below. The register of his field of vision which I have drawn diagrammatically upon the blackboard was obtained by the use of Risley's perimeter, and is, therefore, exact.

Yesterday I was called upon by an agent of the Pension Department, who sought my deposition in this man's case. After I had completed this description which I have just given you, except that it was more in detail, I was asked for an opinion as to the cause. Without hesitation, I answered, "syphilis." He had had evidently what is described as gumma developed in the connective tissue investments of the optic nerve. This had existed in both eyes, extending over the whole surface of the disc in the left eye and covering all except the temporal side, corresponding to about $\frac{1}{2}$ of the whole disc; the invaded part representing in form a triangle, the base of which corresponded to the temporal margin of the optic disc, whilst the apex seemed to lie directly in front of the porous opticus. This fortunate limitation of the disease enabled me to determine

at once the nature and character of the pre-existing inflammation. No other disease which yields to the action of drugs ever shows that distinctly circumscribed character, and at the same time destructive inflammatory action. Syphilis alone appears as a distinctly circumscribed plastic inflammation in non-vascular structures and in connective tissue investments of nerves.

I had occasion at the meeting of the Kentucky State Medical Society at Lexington in 1880 to point out some interesting observations upon circumscribed cortical inflammation of the optic nerve. I had for some years prior to that date been collecting notes of cases of this singular manifestation of syphilis. The publication of that paper brought, through the influence of many professional friends, a large number of other cases of this form of disease. Yet I am impressed with the idea that the profession in general has not given due consideration to this subject. If it can be made to appear that the United States Government is responsible for the ravages of syphilis contracted by its soldiers, this man surely deserves a pension. If it should appear, however, that the Government does not assume responsibility for the effects of syphilis contracted in the military service, then this unfortunate man is doomed to disappointment.

Claimants for pensions are an interesting class of people, and a great many curious cases appear in the course of the duties of an expert, whose services are occasionally sought by the department in the cases of those who base their claims upon damage done to the eyes or to the ears. A few days ago a man receiving a pension upon the rating of one-fourth disability came from a distant mountain region by direction of the authorities at Washington to have me determine the nature and extent of impairment of sight, with special instructions to observe with great care the precise condition of each of the tunics of the eye and particularly the condition of the optic nerve and the retinae with reference to probable atrophy of the nerve as a consequence of typhoid fever, the man having perception of light only.

The lids were adherent to the eyeballs nearly to the cornea-scleral junction, whilst the corneae were rough, vascular, and so densely opaque as to make it impossible under the most favorable illumination to see any part of the iris. It was not difficult from the history given by the man to determine that he had had acute conjunctivitis during the military service, and that the regimental surgeon by making applications of caustic daily had destroyed the conjunctiva as well as the surface of the cornea.

In that part of my certificate which required the extent of his disability to be rated according to his incapacity to earn a livelihood by manual labor, I took occasion to say that the disability was such as to entitle the applicant to all the government allows a soldier who has lost both eyes.

Another very interesting case referred to me with a letter of instruction to examine particularly the tunics of the eye, and to determine the question of any impairment of vision I might find, and the probable cause of it, with special directions to be careful in rating the extent of his disability, was the subject of a recent examination. He had been a pilot in the naval service; he is

about 62 years of age; for twenty years he had suffered impairment of sight, which was equal to $\frac{20}{200}$ with the aid of the glasses he wore; without these he saw $\frac{20}{2000}$.

Ophthalmoscopic examination revealed nothing abnormal, except opaque striae in the left lens; oblique illumination showed slight haziness in the central portion of the right lens. Suspending his accommodation, which would appear unnecessary in a man of his age were it not for the suspicion he might have astigmatism, and subjecting him to the test, I was able to bring his vision to $\frac{20}{20}$ in the right eye, and to $\frac{20}{20}$ in the left. It became at once apparent that abnormal refraction of the eye, due to a malformation of the cornea, was the cause of his trouble, and, as is usual in such cases, about the age of forty he began to experience difficulty in reading at night, and was not able to see the finest type either by day or by night. At the age of forty-five he experienced difficulty in following his profession as a pilot, and this difficulty increased as years rolled on; and the man honestly no doubt believed himself entitled to a pension, and not entirely without apparent reason, charged the long vigils to which he was subjected in the naval service of the United States with the impairment of his sight, which, of course, became more manifest with physical fatigue and advancing years.

The want of perfect perception under correction of the error of refraction is evidently due to the incipient cataract, which it is unreasonable to suppose has been present for twenty years, or even twenty months. It is believed, from the presence of central and slight opacity of the lens, that senile cataract is beginning to develop. The opaque striae in the capsule alone may have existed for a long time, but their polar position makes this improbable.

I hope these few citations from my experience may serve to put you on your guard in your examinations of applicants for pensions, and make you think more deeply than it appears pension examiners are in the habit of doing before certifying to the extent and probable cause of disability from impairment of sight.

Opacities of the cornea are sometimes so slight as to escape detection unless artificial illumination is resorted to, and yet so great a hindrance to the passage of light into the eye as seriously to impair the sight. You may sometimes be able to decide from the form and position of the opaque spot in the cornea as to its probable cause. For example, a man referred to me once for examination with the view of determining the amount of impairment of sight from an attack of small pox contracted in the army, had near the central portion of the cornea distinctly circumscribed circular opaque spots. I consequently gave it as my opinion that this could have resulted from an attack of variola. Had the opacity been of the nature observed in F.'s case, of irregular outline, and in the form of spear-like points projecting from the margin of the cornea toward its centre, with an irregular and dense opacity in the central part, I should have said that some other cause than that of variola alone had been operating here.

The eruptions of variola are symmetrical and always round. They are always distinctly circumscribed; consequently the remaining opacity,

especially in the cornea, will exhibit this symmetrical circular form. Suppurative inflammation of the cornea might follow an attack of variola, and give rise to dense opacities like those in F.'s eyes. In that case we should say that some other cause than that of variola had been present and operating. In the case of Mr. M., the circumscribed portion of sound nerve structure in the right eye remained too distinct to admit of mistake; and the circumscribed character of the destructive inflammatory action which had been present in all the remaining portions of the end of the nerve, with the fluid state of the vitreous humor in both eyes and the floating bodies, and this peculiar state of the end of the nerve in the right eye, fixed it in my mind as being absolutely certain that he had syphilis. The character of the cicatrices at the base of the uvula and the right side of the soft palate, the impaired hearing in the right ear, all pointed to the syphilitic character of the iritis, which too was evidently of circumscribed character and limited extent in the left eye, as near the temporal and inferior margins of the pupil it became adherent to the capsule of the lens.

I did not inquire for the history of this man's affections, because I saw the characteristic signs of this specific form of disease with which he suffered, and because, further, I have long since learned to attach but little importance to the history of the case furnished by the patient or by the friends; and more especially in such cases as this, where the personal interests would naturally tend to bias the judgment, and lead the patient and friends to attempt the concealment of the real nature of the disease.

MEDICAL SOCIETIES.

PHILADELPHIA COUNTY MEDICAL SOCIETY.

Discussion on Recurrent Iritis. (See pages 116-145.)

Dr. Shakespeare, in opening the discussion said: "I agree with Dr. Risley as to the importance of a knowledge of the pathology of these troubles, but I am not entirely in accord with him when he suggests that recurrent iritis is most frequently the direct consequent of extension of inflammation from the choroid.

"My own observation, and even some of the cases related by Dr. Risley, create in my mind the very strong impression that recurrent iritis, when not directly caused by irritation due to suddenly and constantly checked movements of the iris, where a partial synechia exists, is frequently brought about by constitutional conditions which affect the iris quite as directly as they do the choroid. I refer, for instance, to the agency of the syphilitic or the rheumatismal poison in the production of inflammations, and express my belief that when recurrent iritis is not the direct result of the combined irritation of posterior synechia and of a disturbance so slight or transient as in itself to be usually incapable of exciting deep inflammation, it is very often induced by the action upon the iris of a specific irritant, such as the virus, whatever that may be, of syphilis or rheumatism. I can see no valid reason for assuming that recurrent iritis and choroiditis, when as-

sociated or single, and occurring in a rheumatic, gouty, or syphilitic patient, are not each caused by the same constitutional irritant.

"I by no means deny that there are cases of recurrent iritis, where the inflammation of the iris appears to be an extension of an acute, or of an exacerbation of a chronic inflammation of the deeper portions of the uveal tract.

"But Dr. Risley seems to be of the opinion that such is the customary origin of recurrent iritis. It is on this point, then, that I differ from him. Moreover, the author, reasoning from his view of the usual course of recurrent iritis, arrives at the conclusion that adhesions of the pupillary margin of the iris and the adjoining capsule of the lens, so long as the whole pupillary border of the iris is not bound down, and the communication of the anterior and posterior chambers of the eye thus closed, are comparatively insignificant matters, and should ordinarily occasion little or no apprehension. Here again I must differ from him, and still more positively than before.

"I regard it as all-important in the treatment of primary iritis to guard most carefully against the formation of posterior synechia. Furthermore, I consider it important, after the second attack has established the recurrent nature of the malady, and at a favorable moment, to carefully separate the synechiæ if they are not too extensive, or, in the latter case, to remove a portion of the iris by iridectomy.

"Recurrent iritis after synechia is sure in time to bring about complete occlusion of the pupil—a condition which, unless remedied by operation, is certain to prove most disastrous. In order to remove the constant irritation of the iris, caused by one or more bonds of adhesion to the lens, and, still more important, to remove as far as possible the risk of subsequent complete occlusion of the pupil, I do not hesitate to advise the separation, at a proper moment, of slight adhesions, or the performance of an iridectomy if they are very extensive.

"I am very well aware that occasionally (rarely indeed) the capsule of the crystalline lens, at the point of attachment, may be torn in the effort to detach the synechiæ, and a traumatic cataract be established. But the danger is, I think, so small in comparison to the danger that the eye may be ultimately destroyed if the synechiæ be left to themselves, that it is, as a rule, safer to follow the practice of removing synechiæ when recurrent iritis is once confirmed. Of course, the presence of a constitutional irritant greatly complicates this problem. In the cases, which I believe are comparatively rare, of recurrent iritis by extension of inflammation from the choroid or ciliary body, it is possible that the best procedure would be to let posterior synechiæ alone so long as they are not complete, and do not occlude the pupil."

Dr. Little: "Dr. Risley's paper is very important and suggestive, for the early recognition of iritis and its proper treatment prevent or mitigate the serious results that follow in eyes thus affected.

"The vascular tissues of the eye, composed of choroid, ciliary body, and iris, are to be considered as one, and to say that inflammation is limited to only one part of it is difficult.

"The treatment is largely mechanical, that is,

the whole tissue when inflamed should be made free from muscular action; the iris dilated so no adhesions occur; the ciliary muscle and choroid likewise passive, so as not to damage the retina or vitreous; after subsidence of the inflammatory processes, if optical defects exist they should be corrected, so as to prevent recurrent attacks from irritation and congestion that exist in the tissue when optical defects exist, for the effort at seeing produces trouble in these cases, and gives a foothold in a congested tissue for the constitutional taint, specific, rheumatic, or otherwise; mere exposure will produce the same result. The constitutional treatment is more effective in eyes free from strain and normally vascularized.

"As to the use of eserine in iritis, while a few years ago it was considered courageous to use it, in certain cases it acts well, care being taken to guard against adhesion by using atropia at stated times to prevent its adhesion; in cases where the adhesion already exists, it works well in relieving pain; but in the average case of iritis, atropia must be looked upon as the only treatment locally.

"Dr. Risley's suggestion and good effect he had with eserine in a case of sympathetic iritis, while suggestive and contributory to advance in therapeutics of this disease, cannot yet be looked upon as a preventive of sympathetic inflammation of the eye, any more than eserine can be claimed as a permanent method of cure for glaucoma by its use.

"The presence of hyalitis in these severe cases of iritis, presenting a view of the fundus of the eye, can be helped or cleared up to some extent by the use of electricity, so that changes in the retina or choroid can be recognized.

"Opinions as to operative procedure differ in these severe types of iritis; it is better to wait till severe symptoms subside or disappear, and yet some cases do well by immediate operation; not enough such cases have been reported in comparison with those that have had no operation, for any judgment or statistics to be grounded; personal experience gives different opinions to observers."

Dr. L. Webster Fox: "I rise to give the clinical history of a case of recurrent iritis, ending in sympathetic ophthalmia. Eighteen months ago I was asked, in consultation, to see a patient who had had several attacks of iritis in the right eye.

"Mrs. E., aged thirty-three, married, well developed, with an irrelevant family history, always enjoyed good health and normal vision. The family physician three months previously was called to see the patient, who was suffering with pain in the eye-ball, accompanied by supra- and infra-orbital pain, a marked ciliary zone of congested blood-vessels, a discolored iris which was sluggish, and vision blurred. Atropia solution, grs. iv. to 3j., one drop every two hours, and internal medication of calomel was given. The disease responded rapidly to the treatment; the eye regained its normal color with full acuity of vision; three weeks subsequently a second attack came on, which was again promptly treated with good results. Nine weeks after the second attack, a third was ushered in with very severe pain over the brow, down the track of the infra-

orbital nerve, congestion of the sclerotic vessels, with a deeper pink zone of ciliary blood-vessels, musty brown iris and hazy vitreous, with vision reduced to $\frac{2}{60}$; other than the hazy vitreous, no lesion in the fundus could be seen. The following treatment was instituted: Atropia sulph., grs. iv. to $\frac{3}{4}$ i., one drop in eye every three hours, internally; hydrarg. chlor. mit., grs. ij., guarded by pulv. opii, gr. $\frac{1}{2}$ twice daily, and four leeches to temple. The patient improved, and untoward symptoms passed off. The left eye was examined with the ophthalmoscope, and found normal, excepting slight degree of hypermetropic astigmatism. The eye (right) remained quiet for about two months, when another attack came on more virulent and aggravated in its symptoms. Upon instituting the atropia solution, it was found that posterior synechie had taken place, the pupil only responding to the mydriatic in the upper and outer quadrant, possibly to one-sixth its diameter. The media, which had regained its transparency, was hazy (vitreous), obscuring the details of fundus. The vision had fallen to counting fingers at eight feet. In addition to the calomel and opium, a mixture of hydrarg. bichlor., gr. $\frac{1}{4}$, pot. iod., gr. xx in water three times daily, was given; this treatment was continued till permanent salivation had taken place, which was in six to eight days; the hydrarg. was discontinued, but pot. iod. given as usual.

"In two weeks the inflammatory condition commenced to pass off, but vision was reduced to qualitative perception only, after the inflammatory conditions of the eye had disappeared (four weeks after the beginning of the last attack); the patient was suddenly taken with great pains in back of head and at times nausea; these pains became so intolerable that the patient had to be kept under the influence of a hypnotic for several days at a time, this condition lasting off and on for four weeks, at the end of which time paresis of rectus externus of right eye manifested itself; there was convergent strabismus with diplopia, but no hemiopia could be elicited; the patient at this time answered questions intelligently; a careful examination of the right eye revealed no change either in the irregular shape of the pupil or in the haziness of the vitreous. In the left eye, however, a marked change had taken place; owing to the condition of the patient, it was impossible to make an ophthalmoscopic examination of this eye for four weeks. Well-marked keratitis, possetates on Descemet's membrane, iris musty brown, vitreous slightly hazy (?), swelling of the optic nerve, arteries lessened in calibre, veins full but not tortuous, their reflex gone, several small spots of chorioiditis scattered about the equator of the eye, the eye presenting a perfect picture of inflammation of the uveal tract. The urine was examined; no sugar nor albumen found. Medication was pushed till pronounced salivation and iodism made their appearance; notwithstanding this treatment, the eye (sympathizing) continued to grow worse until qualitative perception of light only remained (the paresis of the rectus muscle impressed). The vitreous became so filled with inflammatory products that it was impossible to make observations of the change that was going on in and about the optic nerve and choroid.

"The last attack of iritis in the left eye was four

months ago, when the eye suddenly became painful and exceedingly sensitive to light, this attack lasting three days, the patient having been under constant medication (pot. iod.). Leeches to the temple seemed to relieve the extraordinary condition at once. The patient is still under observation, and at last examination the vision in right eye (primarily affected) was found to be $\frac{2}{60}$, at one time qualitative perception only; in left eye (sympathizing eye) qualitative perception only. I may state that this is the first case of sympathetic ophthalmia, due to recurrent iritis, that I have ever seen, although I had the opportunity of seeing many cases of recurrent iritis while clinical assistant and house surgeon at Moorfields Eye Hospital, London.

"Operative interference was the method adopted at the above-named institution, to protect the patient from recurrent attacks. This was done by excising part of the iris—Mr. Streatfield, at rare intervals performing this operation of separation of the synechie from the anterior capsule of the lens. The iridectomy was performed at such time when it was supposed that the iris was free from inflammation. An operation may be done with safety in from four to five months after the last attack of iritis."

Dr. Risley, closing the discussion, said: "I quite agree with Dr. Shakespeare in his estimate of the importance of systemic conditions in this disease. Not only are syphilitic disease, the rheumatic or gouty diatheses, frequent causes of idiopathic iritis, but they doubtless exert a marked influence in sustaining the pathological conditions involving the entire choroidal tract, as a sequel of the acute iritis. But for these diatheses, many acute cases which are followed by chronic iritis, would have returned to a state of health. It was not my desire to underestimate the importance of the iritic attachment, but to point out that as a factor in the production of recurrent iritis, it had been overestimated."

"If the views I have expressed are true, it renders less justifiable the operations for their detachment, *e. g.*, that devised by Streatfield, gently tearing them away by means of a blunt hook, which he inserted between the iris and lens capsule, or the Passavant operation, which consisted in grasping the iris at the point of attachment with forceps, and by traction detaching the adhesion. If the attachments are not so deleterious as was supposed, the risk following these operations is not to be justified."

"I have no doubt but that an eye constantly in a state of retino-choroidal irritation, in low grades of inflammation, as the result of strain in overcoming a hypermetropia or astigmatism, is more ready to take on all forms of disease, and may, therefore, as Dr. Little very fitly suggested, be more liable to iritis. Certainly, once attacked by iritis, such an eye would be more prone to disease of the choroidal tract and chronic or recurring iritis."

"It was not my wish to present eserine as a panacea, or even as a usual remedy to be employed in the treatment of sympathetic disease; but I reported the case in my paper as a clinical fact, the design being to set forth the value of this drug in improving the nutrition of chronically influenced eye-balls prone to set up sympathetic

irritation, especially where there is increased tension of the offending ball.

"I have had no experience in the use of electricity as an agent for hastening the absorption of vitreous facilities. Ophthalmologists, I am sure, would hail with pleasure any safe method which would accomplish a result so desirable. I should, however, use with great caution an agent, the powers of which are so imperfectly understood, in any eye with an inflamed retina and choroid.

"Dr. Fox has presented a very interesting history in his case of serous iritis, followed by sympathetic irritation. Such cases seem to shed light upon the vexed problem of the pathology of sympathetic irritation. One of the most interesting and important contributions to our knowledge of

the subject, is that of Max. Kneis (*Vid. Archiv. Ophthalm.*, vol. ix, page 125, N. Y.) In the case, the pathological histology of which he has so carefully presented, the disease had been apparently transmitted by the way of the optic nerves. The reported cases of sympathetic neuro-retinitis are getting more numerous, and it would seem that ere long we shall have to relinquish the term *sympathetic*—certainly for very many cases of disease communicated to the fellow eye—for some name which shall indicate its true pathology.

"Regarding the time after the iritic disease, when it is proper to perform iridectomy, I would remark that the symptoms in the individual case are probably the true guide for operative interference."

EDITORIAL DEPARTMENT.

PERISCOPE.

Note on Cholecystotomy.

Mr. Lawson Tait thus writes in the *Brit. Med. Jour.*, May 3, 1884:

The patient upon whom I first did this operation, the first successful one of its kind, and the second ever attempted, has remained in perfect health from the date of her operation, August, 1879, till now. I have performed the operation thirteen times, and all of the patients have recovered. One old woman died from suffocative catarrh some weeks after the wound was healed, and another case died of cancer of the liver, that being, in all probability, the cause of the distended gall-bladder, for I found no gall-stone which I could remove. Beyond the reach of my finger there was a nodule which, at the time, I believed to be an impacted calculus, but this was not confirmed by any *post mortem* examination, and the subsequent history was that of cancer.

The remaining eleven cases are in perfect health, and the results are perfect with one exception, and that exception has taught me a great deal.

It has, in the first place, satisfied me that my much-lamented friend, Dr. Marion Sims, laid down principles from which we are not likely to depart with any advantage, and that he practically perfected this operation, though he did not meet with a successful result in his own case.

Two modifications of the proceedings as advised by him have been suggested and have been put in practice; but they are not based on good reasoning, and have not been successful in practice. The first is a proposal made, I believe, by Sir Spencer Wells, to open the gall-bladder, remove the calculi, and to close it by a continuous suture without attaching it to the abdominal wound. So far as I know, this has been put in practice only once, and the result was fatal. A large quantity of bile was found in the peritoneum; and though this may not have been the cause of death, it is clearly a condition which is unlikely to contribute to success.

But the arguments against this proceeding are much stronger than the mere want of success in a single case. The gall-bladder is an organ subject to periodic filling and emptying, the latter process being accomplished by the contraction of its muscular walls, and this contraction is far more powerful than seems to be believed by any author I have consulted on this point. It also secretes an abundant quantity of clear albuminous fluid from its mucous surface, and this fluid contains—if I may make a conclusion from the few rough experiments I have made on the subject—some kind of ferment. Even if no bile enter the gall-bladder, it speedily fills with this secretion and expels it; so that, if its duct were occupied by a calculus, and a wound in its base were closed by a continuous suture, and not fastened to the abdominal wall, as recommended by Sir Spencer Wells, it is difficult to believe that such wound would remain closed.

It is a matter of extreme difficulty—in fact, I may say, it is impossible during the operation of cholecystotomy—to be quite certain that all the stones are removed from the duct. This canal is distended by the passage of a calculus, urged forwards by the pressure of the secretion of mucus by the gall-bladder itself. So long as the stone is in the cystic duct, the contents of the distended gall-bladder consist entirely of this clear mucus. After the stone has passed the mouth of the liver-duct, the bile flows into the gall-bladder, its passage into the duodenum is prevented, it is reabsorbed into the system, and jaundice is produced. The cystic duct, in its normal state, is of much smaller diameter than the common duct, and the agonizing pain of the passage of a gall-stone seems to be limited, in great measure, to this part of its journey, for it is rare, after these severe attacks, that jaundice occurs. After mild attacks jaundice occurs sometimes, and this indicates that the stone is passing, or has passed, through the common duct.

This leads me to say that, should cholecystotomy be performed whilst a stone is in the common duct, and the gall-bladder treated as recommended by Sir Spencer Wells, it is clear that the pressure

required to force the stone into the duodenum would be much greater than that required to tear open the stitched wound in the gall-bladder; extravasation of bile into the peritoneum ever afterwards would be inevitable.

Exactly the same argument is to be urged with still greater force against Langenbuch's proposal to remove the gall-bladder. The proposal is intrinsically absurd, for there can be no reason for removing any bladder merely because it has some stones in it. In many (five) of my cases the bladder was suppurating and greatly thickened, but the removal of the stones and the drainage of the bladder for a few weeks completely cured this condition. If the gall-bladder were removed at the time that a stone was lodged in the common duct, the bile must all flow, just as in the other case, into the peritoneum. I understand that Langenbuch's proceeding has been fatal in three out of six cases, where it is known to have been tried. It would have been fatal in three of my own cases if I had employed it, for in three of them stones were thus situated. In two I got the stones out, and in the third the stone is still there. Every drop of bile comes through the fistula, and not any appears to go through the intestines. The fistula is a mere pin-hole, and I have tried to close it three times, always with the result of bringing on an agonizing colic which lasts till the bile forces its way out through the fistula. This takes about fifty hours. It is clear I shall not succeed in this way, and I propose to open the abdomen again, about an inch to the inner side of the gall-bladder, and crush the stone *in situ* by means of padded forceps applied outside the duct. If a better plan should occur to any of my readers I should be glad to have it, and if it should be practicable and successful, its originator shall have full credit for the suggestion.

Whilst watching these interesting cases of biliary fistula, I have read much of the literature of investigations concerning the function of the bile, and I have been greatly amused to see how utterly futile experiments on animals have been in settling even the most elementary facts of the influence and the uses of the human bile. Thus I have not seen the slightest evidence to believe that either quantity or quality of food, or any drugs which were used for the legitimate treatment of these cases, as morphia, calomel, podophyllin, and rhubarb, have the slightest effect on the quantity or character of the secretion. None of the patients have suffered in any way when even the whole secretion has come through the fistula, in one case for months, save from the inconvenience of the dribbling. Indeed, in a case still under observation, the patient has positively gained in weight, and has greatly improved in health. The stools are almost milk-white, and there is not the slightest evidence of the flatulence and decomposition which is said in the text-books to be the result of biliary fistula.

The conclusion of the surgical experience in these cases is, that the entire possibilities of the treatment of gall-stone and distended gall-bladder are exhausted in Dr. Marion Sims' original paper published in this journal, that no further extension of it seems possible, and that no further experimentation, such as that of Wells and Langenbuch, seems desirable.

Spontaneous Rupture of Hydrocephalus.

Dr. Allyn Reeve Manby thus writes in the *London Med. Times*, April 26, 1884:

On May 20, 1873, I was summoned to a primipara, who had been in labor twenty-four hours, and was suffering from too much inertia to deliver the head, which I accordingly did for her, with the forceps. The child was an unusually fine male, but had a large spina bifida of all the lumbar, and one or two of the lower dorsal vertebrae, the integuments of which were so thin and transparent, that the vertebral canal was distinctly visible with its contents, some of the fibres of the cauda equina ramifying just beneath the skin. There was also a peculiar deformity of the right foot, which was flat, like a negro's, with the heel projecting nearly as far back as the toes did forward. The child was dressed with the usual abdominal bandage, the pressure of which caused suppurative inflammation, and thickening of the surface of the tumor, so that by August of the same year nothing remained but a fleshy mass, pressure on which caused no discomfort to the child. About this time, however, the mother noticed that the head was "getting bigger," and that the child "stretched itself out and turned blue, as if convulsed, when she dressed it." When I saw it on October first, the child being then eighteen weeks old, it was decidedly hydrocephalous, but otherwise so well that no treatment was suggested or permitted. By Christmas, the head was so large and cumbersome that, when at home in London, the mother showed it to Mr. Jonathan Hutchinson, at the London Hospital, and I lost sight of the case till the evening of January 24, 1874, when the father came to tell me that the "head had burst, and that pints of water were squirting away," as indeed they were, for seven and three-quarter pints of slightly bloody serous fluid were collected in a pail, besides a great quantity which must have been lost on the floor, and in the mother's clothing, which were sodden, as she nursed it. The child seemed relieved by the discharge, and slept better than usual, taking and crying for the breast naturally; but it died in its mother's arms at 10:30 next morning, or seventeen hours after the oozing was detected.

The only measurement that had been taken during life was width from ear to ear, across the crown, and which was 27 inches.

Mr. Amyot published a very similar case (*Med. Times and Gaz.*, 1869), which lived twenty-four hours; and a case, aged ten and a half months (reported briefly in the *Med. Times and Gaz.*, April 14, 1869, p. 421), soon after this, by Dr. Frederick Brown, of Rochester, died ninety-six and a half hours after bursting, and the discharge of two quarts of coffee-colored fluid, on which the head "fell in, looking like broken pottery."

I was only allowed to make a very incomplete inspection, and by no persuasion or bribery could I induce the parent to part with the body for a museum. The aspect of the child was typical, according to Prescott Hewitt (*London Med. Gaz.*, 1844, or Watson's "Practice of Physic," fourth edition, vol. I., p. 473), of intra-ventricular fluid, the facial skin being drawn upwards and outwards, arched the eyebrows, and rendering the supra orbital ridges prominent, the pupils of the eyes turned down, leaving the upper part of the

conjunctiva exposed. The skull presented the appearance of a large bowl, with jagged edges, the scalp having collapsed completely, an appearance Trousseau somewhat poetically describes (Trousseau, "Clinical Medicine," New Syd. Soc., vol. i., p. 474), as "like the petals of an opening flower," but which Dr. Brown, with more truth, calls "a horrible and sickening sight." It measured, without allowing for the in-squeezing of the bones, as it was held, twenty-three inches round the edges, and half an inch more a little lower down, in circumference; probably, for the age of the child, it is one of, if not, the largest on record; for a child of three years old, which Dr. Gardner, of New York (*Med. and Gaz.*, 1861, p. 259), exhibited in 1861, as having the largest head but one, "in or out of any museum," measured but twenty-three inches from the tip of one ear to the other, and thirty-seven and a half inches from the junction of the nasal bones to the os frontis, to the base of the occipital bone; he also gives the horizontal diameter as thirty-two inches, but as that would imply a circumference of more than eight feet, and as, moreover, he speaks of circumference further on, we must conclude that he means horizontal circumference. The scalp was thick and elastic, covered with large veins, and seemed to be structurally natural, with the exception of a rough reddened patch, the size of a shilling, about the middle of the left half, in the centre of which was a small pin-point hole, through which the water had passed; on enlarging this, and raising the scalp, air rushed in with a whistling noise, and a little more water passed out. The brain was unrolled, and spread in a thin, coarsely reticulated layer over the inside. Ulceration and thinning of the membranes was evident beneath the red spot which had given way in the centre, as before described.

Cases of spontaneous evacuation of the hydrocephalic fluid may be found here and there in medical literature, but, excepting Dr. Brown's and Mr. Amyot's cases, none resemble mine. Mr. Greenhow, of Newcastle, published a case in 1852 (*Newcastle Pathological Society*, November, 1852), in which the fluid exuded through the scalp, without any definite opening, during the child's straining efforts, and cases of fatal and non-fatal rupture through the ethmoid bone and nares are mentioned by Trousseau (*New Syd. Soc.*, vol. i, p. 477); Leonard Sedgwick (*Medical Times and Gazette*, March 15, 1856, p. 259), and others.

A curious case, the converse of mine, was shown at the Pathological Society in 1857, by Mr. Hutchinson (Pathological Society, *Medical Times and Gazette*, March 17, 1857), in which the head decreased, while a spina bifida in the sacral region oozed. The child ultimately died, and at the autopsy, the central canal of the spinal cord was found dilated to the size of a crow-quill.

On Acne in Fibre-Dressers.

Dr. Charles Atkin thus writes in the *Lancet*, May 31, 1884:

A dermatitis taking an acneiform character, arising from an external irritant, is certainly uncommon. "Eczema," so called, in its various stages, is met with in many trades and occupa-

tions in all its varieties, from the "weeping vesicle" to the "leathery scaling skin;" but rashes of a tubercular form arising from external irritation of the hair-follicles have hitherto, as far as I know, been limited to those who work with tar, paraffin, benzoine, etc., or those cases where tar has been energetically used to cure some other form of skin disease, as psoriasis or chronic eczema. During last summer my attention was directed to a form of rash on the forearms and thighs of a certain class of workmen, different from anything else I had ever seen in those situations. The first case met with was in a healthy-looking, intelligent man, aged twenty-four, who described himself as a fibre-dresser, at which special department of brush-making he had been employed for the last two years. His work consisted in dipping a fibre called "kitool" and cocoa-nut fibre into some special preparation of various oils, soaking it, and then tearing and pulling it out. Since he has been employed at this work he has suffered continually from a rash, which itches and is sometimes painful. His forearms were more or less covered with raised tubercles, discrete, and presenting all the stages from the "black point" of the closed sebaceous gland to the suppurating, tense, and painful nodule. There were no pustules on the backs of the hands, but the "black points" were universal, and could be extruded by pressure or picked out by a needle-point. Wherever pustules had been were well-marked scars. The hairs on the back of the forearm were scanty, and could easily be pulled out with forceps, without any pain whatever. The same condition existed on the front of the thighs and shins, but more especially on the knees. There was no appearance of acne on the face, and only very scantily on the shoulders. Under the microscope the hairs treated with solution of potash were seen to be very swollen at their roots, with much adherent epithelium, evidently from proliferation of the lining of the hair-follicle. The man being otherwise healthy, with no appearance of struma, syphilis congenital or acquired, or scorbutus, the rash was evidently connected with his work. On being questioned, he informed me that he continually got his trousers soaked in front in dipping the kitool, and that he worked with his coat off and his sleeves rolled up. The next question was, What was the cause of the rash—the fibre or the oil? The former, which is a kind of coarse dried grass, produces no local ill effects on those who simply sort and pick it, causing only some throat irritation from the quantity of dust arising from it; therefore, the cause evidently lay in the liquid used. On procuring a sample of this, I detected a smell of paraffin in it, and learned on inquiry that it was not unusual to have this special oil mixture adulterated with this material. On visiting the place where the man worked, I found that all the men engaged in a similar occupation had acne more or less on their forearms, and that those who had been employed for some length of time were nearly absolutely hairless on those parts. Hebra says that when a rash is due to paraffin, etc., it does not usually come from direct contact of the irritant with the skin, but by the person living in an atmosphere impregnated with its vapors; such, however, can hardly be

the case here, for the rash is strictly localized to those parts which come in contact with, or are saturated by, the fluid, and also by the fact that it does not occur in those who only sort the fibre, though they are often at work in the same room. Again, it differs from acne caused by tar in that, Hebra says, the rash disappears on discontinuance of the irritation, leaving neither maculæ nor scars. Here the rash, though he was told it very much improved during a week's stay in the country, left most indelible marks of its former existence. Why should substances like mercury and antimony, acids, croton oil, cantharides, turpentine, and mustard, applied locally produce an eczematous dermatitis, whilst paraffin has apparently a very irritating effect on the hair-follicles and their adjacent sebaceous follicles, as they seem to be primarily affected; but why should not turpentine be equally so? The mildness and chronicity of the application may account for it; for it is well known that vegetable irritants cause a more acute form of dermatitis than the mineral ones; but that does not explain why the local application of mercury should not cause an acne as well as a papular eczema. In confirmation of the irritating properties of paraffin, Dr. Longmuir pointed out that epithelioma not uncommonly occurs in those who have to handle and work with it, but he does not mention whether he has noticed acne also. The fact of both acne and cancer having been attributed to the same irritant, suggests the question, Does traumatic acne ever go on to traumatic carcinoma?

REVIEWS AND BOOK NOTICES.

BOOK NOTICES.

Second Annual Report of the State Board of Health of Indiana for the year 1883.

It is gratifying to see that the Indiana Board of Health is grappling with the problems of sanitation in earnest. Besides the general report, this volume contains various special articles, several of a notable character, as one on the health of the early settlers, by Dr. M. W. Latta; one on the hygiene of farmers' homes, by Dr. J. F. Hibberd; on restraint in the treatment of the insane, by Dr. W. F. Fletcher; on hog cholera, by Dr. J. M. Partridge, and others. The vital statistics of the State are set forth with fullness and accuracy by Dr. E. S. Elder.

The Alpine Winter Cure. By A. T. Tucker Wise. Baillière, Tindall & Cox, London.

The effect of cold, dry climates on chronic pulmonary disease is more and more recognized as beneficial. Probably nowhere can this be obtained with less sacrifice of the comforts of civilization than in Switzerland. This is true in winter as in summer, and the winter resorts in Switzerland are constantly increasing. In the volume before us, Dr. Wise speaks of Davos Platz,

Wiesen, St. Moritz, and the Maloja. His information is full and from personal knowledge, and it will prove satisfactory to invalids and health-seekers. He also gives many general suggestions to travelers in Alpine climates, and they are well worth perusal by all.

Student's Manual of Electro-Therapeutics. By Dr. R. W. Amidon. G. P. Putnam & Sons, 1884.

The need of a brief manual of the essentials of electrical treatment has induced the author to present them in the least technical manner in the volume before us. Our only criticism upon it is that it is so very brief that it offers but an inadequate idea of this branch of therapeutics. The illustrations are reasonably numerous and well printed.

Hooper's Physicians' Vade Mecum, Vol. II. Wm. Wood & Co., New York city.

We have previously referred to this work on the appearance of the first volume. The present issue briefly sets forth the various special diseases, and completes the work. It is a member of Wood's Library of Standard Medical Authors, and will be appreciated by the subscribers to that valuable series.

An Introduction to Pathology and Morbid Anatomy, by T. Henry Green, M. D. Fifth American edition. Henry C. Lea's Son & Co.

This convenient brief treatise now appears with a careful revision of the author, and is presented on excellent paper and with admirably printed cuts by the publisher. A number of new points have been added to previous editions, and the rapid increase in this branch of medical science has been closely followed up. We can recommend this work as of as great practical utility as any with which we are acquainted on morbid changes.

Scarlet Fever in Huntingdon.

Advices from Huntingdon (this State) say that scarlet fever and scarlet rash have prevailed so long in that city that they have ceased to excite special comment, and people have become as familiar with their presence as with anything else with which they have daily contact. It is almost a year since these diseases became epidemic, and in that time they have visited fully one-third of the families in the city. In April last the public schools were closed for several weeks, and when they were reopened it was thought the danger was past; but it soon became as great as ever, and there has since been no abatement, nor does there seem to be any probability of a change until the diseases have gone through the families that have thus far escaped. There have been some deaths, but not a great many in proportion to the total number of cases. The schools closed about two months ago for the summer vacation, but the spread of the diseases has since been as great as it was before.

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HYDROPHOBIA.

In the *Medical Times and Gazette*, London, England, December 1, 1877, Edw. Wolfenden Collins, M. D., F. R. C. S. Ire., Surg. to Jervis St. Hospital, writes:

"For the treatment of hydrophobia it would appear that in curara we have a valuable therapeutic agent; and I desire to strengthen the hands of the editors of the *Lancet* and *Medical Times and Gazette* in their recent able editorial comments on this subject. In these articles it has, I think, been too hastily assumed that no proof exists that any case of genuine hydrophobia has ever been cured, unless it be that recorded by Dr. Offenburg, of Wickrath, in 1874, to which allusion is made (*Medical Times and Gazette*, October 6, 1877). It is my object to show that this statement, which has so far escaped criticism, does not represent the sum of our therapeutic knowledge regarding the successful treatment of this disease. The other two recent cases, which I shall bring under notice, are besides of much value, as they point exactly in the same direction as that of Dr. Offenburg, and taken together with it, warrant the hope that in similar cases, curara, when pushed rapidly to the manifestation of its peculiar physiological effects, may be found equally efficacious.

"In the *Amer. Journal of Medical Sciences*, July, 1876, page 81, Dr. B. A. Watson, of Jersey City, minutely discusses and gives the fullest particulars of a case which he and Prof. Austin Flint regarded as an instance of true rabies canina. The symptoms of rabies developed themselves forty-seven days after the individual—a strong, healthy man, forty-five years of age—had been bitten in the finger by his own rabid dog. His servant-girl, who had been bitten at the same time and by the same animal, died five days before the commencement of her master's illness, of unmistakable hydrophobia. In this man's case there was a gradual increase in the severity of the symptoms till after the subcutaneous administration of curara in full and rapidly-augmenting doses ($\frac{1}{15}$ gr., $\frac{1}{10}$ gr., $\frac{1}{5}$ gr.) every third hour. The unfavorable symptoms forthwith subsided, and disappeared completely after the third injection.

"The second case was treated by Dr. Polli, and an abstract of it appeared in *Le Paris Med.*, May 17, 1877. A child, twelve years old, had been bitten by a rabid dog eighty days before the manifestations of the hydrophobic symptoms. Subcutaneous injections of morphia and chloroform inhalation having been tried without success, curara

was injected subcutaneously on seven different occasions within the short space of five hours and a half. During this period twenty centigrammes (three grains) of curara were injected. The hydrophobic symptoms quickly subsided, being replaced by paralytic phenomena of a very pronounced character. Two days subsequently some renewed hydrophobic symptoms were completely banished by a fresh injection of three centigrammes (nearly half a grain) of curara. The child slowly recovered.

"In Dr. Offenbergs's case (*Medical Times and Gazette*, October 6), where characteristic symptoms of rabies manifested themselves in a woman aged twenty-four, eighty days after she had been bitten by a rabid dog, the subcutaneous injection of one-third of a grain of curara at intervals of fifteen minutes at first, and subsequently at intervals of an hour, resulted in the cessation of the hydrophobic symptoms, and the supervention of general paralysis, rendering artificial respiration necessary. In this case, within the space of four hours and a half, seven injections were used, representing altogether nineteen centigrammes (nearly three grains) of curara. On the evening of the third day renewed hydrophobic symptoms, which had assumed a serious aspect, were promptly controlled by one other injection of curara.

"If it be conceded that these well-authenticated cases were instances of genuine hydrophobia (as their narrators with good reason maintain, from a careful consideration of their history and all the symptoms), they are uniformly and highly suggestive as regards a method of treatment of this malady which hitherto has not received the attention it thus demands. More than ten years ago, Trousseau, when suggesting the possible advantage of the subcutaneous administration of curara in hydrophobia, was not deterred by the want of success which had attended its use in tetanus. 'Perhaps the want of success,' he remarks, 'may be largely due to the mode of administration of the drug' (*Clinique Medicale*, vol. ii, p. 380). This, it appears to me, is the point on which these three cases are so instructive. They demonstrate that, to be of service, curara must be employed in full and (probably best of all) in rapidly augmenting subcutaneous doses, varying from one-tenth to half a grain, at short intervals, until the paralytic symptoms, which experimental physiology has taught us to recognize as the manifestation of the full influence of the drug, begin to develop themselves. At this stage artificial respiration may even become necessary, as in Dr. Offenbergs's case. The variation in strength of

specimens of curara renders it important that the injection fluid should be procured from those who are likely to have exercised special care in the selection of the drug. A solution so concentrated (half a grain in five minims) as that prepared by Messrs. Gale, of Bouverie street (*Lancet*, Nov. 10), if reliable, seems to supply such a desideratum."

NOTES AND COMMENTS.

Borate of Quinine.

The amorphous borate of quinine is an amber-yellow, almost crystalline-looking powder. It has a mild, bitter, by no means disagreeable taste, and is soluble in equal parts of water. As the drug can be sold much cheaper than sulphate or muriate of quinine, and as its taste would specially adapt it to the diseases of children, Drs. D. Finkler and D. Prior in Bonn, instituted a series of observations for the purpose of determining its effect. (*Deutsch. Med. Wochens.*, 6, 1884.) The results were as follows:

The remedy was administered in doses varying from 8 to 16 grains. These doses were given every half or every hour, so that within from two to four hours in *maximo* 48 grains were used.

For the purpose of discovering how the drug is borne by the stomach, it was tried in many cases of tuberculosis, and in those of acute and chronic gastric catarrh. Some of those patients were in the habit of vomiting when they committed the least error of diet. *In none of the very numerous cases did the borate of quinine ever cause vomiting.* Even in phthisical patients suffering from chronic catarrh of the stomach, and being very sensitive to any nauseous drug, the remedy never induced any augmentation of their gastric troubles.

The drug had not only the same anti-febrile effect as quinine sulphas, but it had also besides a peculiar disinfecting action upon the intestinal canal, and in patients, who had used the remedy for a number of weeks, not the least deleterious influence on stomach or intestines was noticed. In patients suffering from high fever, and having previously vomited after calomel and muriate of quinine, the borate not only caused the same reduction of temperature, but it was also well borne by the stomach. It seems to be specially well borne, if a larger quantity of water or a small dosis of brandy is taken after it. It never produced tinnitus aurium. One of the experimenters, suffering from a severe nasal catarrh, took two doses of eight grains each without any bad

after-effect, while the same doses of muriate of quinine usually caused a sleepless night, in consequence of the violent buzzing in the ears.

The administration of borate of quinine in the evening induced a reduction of temperature in the morning; if it was taken in the morning, a fall of temperature was noticed at about 2 p. m., while if then a dose was given the temperature declined in the evening, so that in this respect the borate also resembles the effect of the muriate or sulphate of quinine.

Considering, therefore, the cheapness of the remedy, and the fact that it has the same effect as the quinine salts usually employed, and considering its greatly better taste, and the fact of its being well borne even in large doses by the most delicate stomach, its general introduction probably will be but a question of time. Its antipyretic, as well as its disinfecting action is probably due to the boracic acid. It is manufactured in Germany and there sold for but half the price as sulphate of quinine.

The Castration of Women.

The *Med. Times and Gaz.*, April 12, 1884, says:

A recent number of the *Zeitschrift für Geburtshülfe und Gynäkologie* contains an article by Dr. Wilhelm Tauffer, of Buda-Pesth, on the above subject. He relates twelve cases of this operation performed by himself, and then presents the conclusions which follow. We cannot say that this author is as cautious in drawing inferences as we should like, but we give his propositions, which must be taken for what they are worth:

1. Castration is an operation which with proper care is not attended with any great risk: the unavoidable mortality being now less than ten per cent.

2. The operation should be performed with antiseptic precautions and under carbolic spray; the abdominal cavity should be closed; drainage is only exceptionally required.

3. The limitation, that castration is not called for when the climacteric is near, can only be conditionally accepted, because the age at which the climacteric occurs is very different in different individuals, and cannot be foretold.

4. The condition laid down by Hegar, that the ovaries should be distinctly felt before their extirpation is attempted, is an impracticable one.

5. Both ovaries should be removed, even if the disease be limited to one; excepting in cases where special circumstances make it desirable to leave behind the apparently healthy ovary. The reason for removing both ovaries is, that the re-

maining gland has a tendency to become diseased in the same way as its fellow.

6. It is generally desirable to remove the tubes as well as the ovaries; and it is unconditionally necessary if there be the slightest appearance of disease in them.

7. Hystero-epilepsy is curable by castration.

8. The symptoms grouped together under the name of hysteria, when rightly analyzed, can often be traced back to ovarian disease.

9. The question as to the influence upon uterine fibroids of the ligature of large nutrient vessels going to them, without castration, is worth consideration.

10. With regard to prognosis it is important to remember that the menopause only follows immediately upon the operation in those cases in which the neighboring organs are not diseased; but all inflammatory conditions of them delay the climacteric.

11. The final result of castration can only be determined after the lapse of months.

12. It must be regarded as an open question how far diseases of the female sexual organs influence the development of certain psychoses.

13. So must the question whether such psychoses are curable by castration.

14. In the interest of unity and comparison of observations, it is desirable that the classification of cases (suitable for this operation) adopted by Hegar should be generally accepted.

Hysterical or Nervous Breathing.

The characteristic features of most of these cases are cough, with or without blood-spitting, usually of a venous character, with very rapid and very shallow breathing, and absence, as a rule, of physical signs of disease. Such is the general description which Dr. W. Martin Coates gives in the *Brit. Med. Jour.*, July 5, 1884, of a manifestation of hysteria, which, while not common, has yet presented itself to him several times during the past twenty years. The following case is selected from those which he records:

Case 1. This lady, aged 30, is one of a very sensitive family. Her history was a sad one. She had been married to one to whom she was devotedly attached. Three weeks after marriage, he died of hæmoptysis. A year after this, she called to consult me, with the preface that she knew it was of no use, as one of her lungs was diseased. She told me that she had a constant cough, and that she frequently spat blood. She had consulted an eminent practitioner at a wintering sea-side place. She said that he had told her

that the upper part of the left lung was diseased, and that he felt great anxiety about her. I examined her chest, and found nothing abnormal, except very quick and almost imperceptible vesicular breathing on the left side. I could not induce her, for a long time, to draw a long breath. This is a marked peculiarity of these cases. At last, I told her to count twenty without drawing breath. She did so, and then she expanded her lung perfectly, the air entering freely into every part. I expressed to her a conviction that her lungs were healthy. She was much offended, and gave me to understand that I was mistaken. This taking of offence at being told that at which a healthy mind would rejoice, gave me the first hint that I had to deal with a mind morbidly craving for sympathy. Some months after this, she called again, and told me that she had consulted Dr. C. J. B. Williams, who confirmed my diagnosis. She is still alive, but ever an invalid, with simulated disease. Sometimes it is neuralgia, sometimes constant vomiting, at others asserted amenorrhoea. At present, she has what she has been told is "angina pectoris;" but, as it attacks her only at night, and not when ascending a hill or when walking against the wind, it is, of course, nothing of the sort. She has long since lost her cough and blood-spitting.

The treatment must, of course, be the same as that pursued for any other hysterical manifestation.

The Efficacy of Iodoform in Preventing Uterine Colic and Pelvic Inflammation Following the Intra-uterine Application of Nitrate of Silver.

At the recent meeting of the Medical and Chirurgical Faculty of Maryland, Dr. Sellman read a paper with this title, which was a practical one, and gave in detail Dr. Sellman's experience with these agents. He began by saying that, in the majority of cases of endometritis, applications of nitrate of silver (gr. lxxx ad f. ʒj) had been the most useful agent he had used. Perfect cure or great relief followed its repeated use, and he had never seen stricture or closure of the uterine canal follow. But a serious objection to it is that not unfrequently his patients would suffer severe attacks of uterine colic either immediately after the application or within an hour, and he had seen pelvic peritonitis and ovaritis brought on by it. He then recounted a case of this kind. To relieve the colic, which was of common occurrence, he tried belladonna, opium, and hyoscyamus, without effect. Knowing the anæsthetic power of iodoform, he tried that, and has never

since had any after-trouble from the application of nitrate of silver. As to the cause of the uterine colic, he said that in congestive and inflammatory conditions of the uterus there exists, as a rule, a state of hyperæsthesia, and a nervous condition of the whole organism. The application causes the cervical canal to contract, and prevents the excess of fluid from discharging into the vagina. He never had a case of uterine colic with dilated canal. Pelvic inflammation following the applications he thought due to the excess of fluid being forced into a patent Fallopian tube. He never had a fatal case, but they caused much solicitude. His method is to make the application of the nitrate of silver solution on a cotton-wrapped applicator, immediately following it with powdered iodoform applied in the same manner. Sometimes the cervical canal contracts so suddenly and violently as to prevent the applicator being passed the second time. Under such circumstances he inserts a suppository or uterine bougie medicated or charged with iodoform. He covers the cervix thoroughly with iodoform, and sometimes saturates a pledget of cotton with iodoform and vaseline, leaving a string attached for the patient to remove it the next morning. These procedures have prevented all unpleasant after-effects.

Anthrax.

An ox having died from malignant pustule, was cut open. The intestines were removed by a butcher, æt. 64. Twenty days later a pustule developed itself on the forearm of the butcher, and caused an extensive inflammation and infiltration of the surrounding skin. The parts affected were then removed by an operation. The microscopical examination of a piece of the diseased skin showed besides the well-known morbid histological elements the bacilli of anthrax in great numbers, in the exudation between the papillary bodies and the rete Malpighii. Some were found also in the papillæ. The greatest quantity of bacilli was discovered in the middle of the pustule. None of the bacilli had penetrated into the blood-vessels, sebaceous glands or roots of the hairs, which fact may explain the eventual recovery of the butcher.

The patient was in charge of Dr. Bleuler (*Corr. Bl. f. Schweiz. Aerz.*, 7 and 8), who proposes to practice a similar protective inoculation in persons, whose occupation frequently brings them in contact with cattle or sheep suffering from anthrax, as has been employed by Pasteur and others in animals. As well known, a drop of the blood

containing the bacilli of malignant pustule is added to a small quantity of chicken—bouillon—which while being kept sterile, is exposed for about two weeks to the atmosphere. Then a drop of this fluid is added again to a similar quantity of chicken-tea, and this exposed to the air. In this manner at last a fluid is obtained which, when injected into the circulation, for instance, of a sheep, will effectually protect the animal against the infection by anthrax, while scarcely causing a local irritation. Thus far the experiment has not yet been tried on the human being. It may, perhaps, be finally proven that we can make thus "disease-proof" every individual exposed to the influence of infectious maladies. Who will make the first trial with the poison of cholera?

Idiopathic Ascites.

The Jour. de Med. et de Chirurg., May, 1884, says that Dr. Toulze defines this affection as an ascites occurring suddenly in a previously healthy individual, continuing for a variable time with perhaps one or more relapses, but terminating finally in recovery. Its cause is found in a sudden chill, either from external influences or from the ingestion of very cold fluids, or it may come on after the sudden suppression of the catamenial flow or the recession of an exanthematous eruption. It may exist as an acute, a subacute, or a chronic condition. The acute form is accompanied, as a rule, by a rather intense pyrexia. The abdomen is more or less distended with fluid, which gives rise to the usual functional troubles. The subacute form is of longer duration and presents the same symptoms, though in a less pronounced degree. The chronic variety is characterized especially by the frequent relapses. The course and duration of essential ascites are naturally very variable; but that which characterizes all the different forms is the favorable termination. A spontaneous cure almost always obtains by crisis at the end of a month or two, sometimes more, sometimes less. The fluid is carried off by way of the kidneys, the skin, the intestines, or even, in some cases, by the mammary glands. Instances have been noted in which an increased secretion took place from accidental wounds or from ulcerated surfaces, the ascitic fluid finding vent in this way. The treatment consists in favoring by derivatives the removal of the fluid. Diuretics and drastic purgatives are especially indicated. Paracentesis should be reserved for those rebellious cases which seem to resist the action of internal remedies.

Meconium in Its Forensic Aspects.

Dr. J. Ch. Huber (*Friedreich's Blätter für Gerichtl. Med.*, 1884, pp. 24, 142) treats this subject elaborately, and gives a bibliography extending from the time of Aristotle downwards. According to his own observations, the most important substance found in meconium is that greenish-yellow body which more especially determines the color of the dark greenish-black masses. These bodies, which Tardieu admirably depicts in his *Study of Infanticide*, are mostly of oblong, elliptical, oval, or roundish contour, and are not unfrequently flaky with rounded angles. In size, they range from that of a microcyte (and less) to that of a squamous epithelial cell from the tongue. As these bodies, which appear to be altogether homogeneous in structure, are enveloped in mucus, it is very difficult to ascertain how they behave towards chemical reagents, which penetrate them slowly. They are unaltered by acetic acid and by ether, but dissolve in solution of potash. The bile-pigment reaction has been obtained from them by good observers. It is more difficult to decide what is their basis (albumin or keratin?), whence they arise. When we take into consideration the abundant shedding of epithelium in the small intestine of the fetus, Huber cannot avoid the conclusion that we have here to do with intestinal epithelial cells, which have become swollen, confluent, and disintegrated. On account of their frequently characteristic form, and the ready possibility of their detection in dried meconium stains, he holds these bodies to be of great importance, and, at any rate, as much more characteristic than those amniotic elements which have been swallowed.

Myositis Ossificans Progressiva.

A man æt. 23, had been ailing from his earliest childhood. When nine years old, he had made the first attempt at walking. His family evinced no neuropathic history. Exposure to cold and rheumatic affections could not be elicited as pathogenic causes. Besides atrophy of the muscles and at some places their total disappearance, some were truly ossified, and peculiar ankyloses had formed. The latter were especially noticeable in the spinal columns and in the joints of the jaws. Notwithstanding the long suffering of the patient, his general health was not greatly disturbed, and he complained only when, as would happen every few months, a local swelling developed itself in some of the affected muscles. Dr. O. Kohts, who reports this rare case in the *Jahrb. f. Kinderheilk.*

xxi. 3, says that he saw but once ossification happen at the place of the local swellings. The urine evinced nothing abnormal. Faradic muscular contractility was preserved in the affected muscles. It was not so strong, as in healthy muscular fibres, but considering the diminished quantity of muscular tissue, electric excitability was not lessened, or in other words, those muscular fibres, which were still preserved, showed a normal electric reaction. Intelligence, taking into consideration the general condition of the patient, was not affected. The malady is probably purely a disease of the muscles.

Ephemeral High Fevers in Children.

How often are we called to a sick child with a high temperature and a bounding pulse, the family anxious, and we, ourselves, half inclined to expect a most serious disease, when, lo and behold, in a few hours the child is laughing and playing as though sickness had never been even thought of. It has proved to be merely an ephemeral fever. Dr. Henry N. Read publishes a paper on this subject in the *N. Y. Med. Jour.*, July 19, 1884, in which he gives the following points which may be taken into consideration in endeavoring to make a diagnosis between these ephemeral fevers and others of a specific or symptomatic nature:

1. The absence of any local inflammation, or of the history of any recent injury.
2. The abrupt beginning, without prodromes; the rapid rise in temperature; the early severity of the febrile symptoms, commonly greater at the commencement than in either enteric or typhus fever.
3. The duration is very short, usually not more than twenty-four hours—oftener less than more.
4. Absence of eruption.
5. Absence of the abdominal symptoms of enteric fever and the circulatory symptoms of meningitis.
6. Absence of jaundice, or of the enlargement of the spleen and liver which marks malarial and relapsing fevers.
7. Absence of epidemics of all kinds.

Treatment of Stomachic Dyspepsia.

In the *St. Louis Med. and Surg. Jour.*, April, 1884, Dr. John H. Duncan says:

I regard the quietude of mind and body, however, of as much, if not more, importance than the drugs. Among the best stomachic tonics are pepsin, the simple bitters, for they contain neither

astrigent nor aromatic properties, they increase the flow of the juice simply by their bitterness. One of the best preparations of hydrastis is the fluid hydrastis, for it contains neither alcohol nor a resin, and is therefore non-irritating. In such conditions, I always advise the use of some sour wine, either just before or during the meal. It is of the greatest importance that the patient does not overload the stomach and consequently it would be far better that he, if it is convenient, does not confine himself to the regular three meals a day, but eat oftener and a smaller quantity, thus giving the stomach the time and opportunity to digest its contents. If the dyspepsia is due to an over-abundance of gastric juice which can be ascertained by the acid eructations after digestion is completed, I would give the dilute phosphoric acid directly after meals. I give it upon the principle that acid applied directly to the mouth of a secreting gland diminishes its secretion. The pyrosis, cardialgia, and acid eructations of any form of dyspepsia, are relieved by alkalies. If the dyspepsia is due to the depraved condition of the blood, thus affecting the quality of the gastric juice, I would give blood tonics; and in fact, in any form tonics are advisable. The only treatment for dyspepsia due to alcoholism is the withdrawal of the alcohol and the use of such remedies as are used when there is simply indigestion due to a deficient quantity of blood to the peptic glands.

Cause of Epilepsy in the Brain.

In *Du Bois-Reymond's Archiv.*, 1884, p. 79, the following interesting experiment by Dr. S. Danillo, is reported:

While under the influence of ether a dog, which had first received a subcutaneous injection of morphia, was operated upon. The cortical surface of a whole half of the cerebrum was carefully dissected off. About half an hour later the parts were electrically irritated in the manner, first recommended by Du Bois-Reymond. When the anterior parts were excited (the motor-sphere) spasmodic contractions were plainly observed, while the whole posterior layer was almost insensitive to all electrical impressions. But if the current was very strong and applied for a longer time, the same phenomena happened, and the irritation seemed to spread to the deeper lying parts.

Dr. D. draws the conclusion from these experiments, that the cortical gray matter of the posterior part of the brain is the original starting point of an epileptical seizure. Besides our knowledge of the local function, not much benefit will be de-

rived from these investigations, as they make surgical interference but still more problematical than it is at present, and medical treatment appear as useless.

Sclerotic Acid in Epilepsy.

From *Le Progrès Méd.* we learn that in December, 1882, four epileptic children were treated with the following solution:

R. Sclerotic acid. grs. vijs to xss.
Distilled water, f. 3 ijss.
Carbolic acid, grs. xss.
M. S. Each injection should contain from gr. $\frac{1}{2}$ to $1\frac{1}{2}$.

For hypodermic use, the dose has not been greater than gr. $\frac{1}{2}$. The duration of the treatment was six weeks for one child, which died; six and a half months for two others, and seven months for the fourth.

For internal administration, the acid is given in an aromatic adjuvant (*julep*), morning and evening. Eight epileptics have been treated in this manner, the dose of sclerotic acid progressively increasing by about gr. $\frac{1}{2}$ every week. The average duration of treatment for these eight patients was three hundred and fourteen days. Of the twelve patients treated by both methods, only five have been improved. These results are not very encouraging, but, under the circumstances, it may be worth while to experiment still further with this drug.

Pilocarpia in Exudations.

For several years Dr. De Dominicis in Italy has employed pilocarpia in pleuritic and peritoneal exudations, and his success has been so uniform as to induce him to consider the non-absorption in any such a case to be due to some existing complication. He uses pilocarpia only subcutaneous-ly. In his opinion it causes an increase in the heart's action, save during the period of active diaphoresis when the pulse becomes slower. He has also discovered that the addition of quinine or caffeine diminishes the therapeutical effect of the drug. About a year ago some German observer reported, that if jaborandi is given in a cup of strong coffee, its weakening influence on the heart is not noted, and in D.'s observations we now find an explanation of the doubtless correct statement.

Some Formulæ for Irritative Diarrhoea.

At this time of the year when irritative diarrhoea is so very common and so apt to prove serious among children, we are pleased to note

some formulæ that have been found very useful by Dr. E. H. Bartley (*New York Med. Jour.*, July 19, 1884):

R. Ol. ricini, f. 3 iv.
Bismuth. subnitrat, 3 ij.
Magnes. carbonatis, 3 j.
Sacchari, 3 ij.
Ol. anisi vel ol. menth. pip., m. vj.

M. Sig.—3 j. for a child of six months to one year.

Or we may use:

R. Vin. pepsini, f. 3 jss.
Bismuth. subnit., 3 ij.
Glycerini, 3 iv.

M. Sig.—3 j. at a dose.

Dr. Meercay, of Cape May, New Jersey, highly recommends the following:

R. Ol. ricini, 3 iv.
Tr. opii, gtt. iv.
Pulv. acacea, q. s.
Sac. alb., ad. 3 ij.
Aq. menth. pid.,
M. Sig.—Dessertspoonful every three hours.

Treatment of Cholera.

From the *Med. Record* we read that Horner's anti-cholera mixture, recommended by Hartshorn and Bartholow, may be used before or at the beginning of the stage of collapse:

R. Chloroform.
Tinct. opii.
Spts. camph.
Spts. ammon. aromat., aa f. 3 jss.
Creasote, gtt. iij.
Olei cinnamomi, gtt. viij.
Spts. vini gall, f. 3 ij.

M. Sig.—Gtt. x. to xx. in ice-water every five minutes.

A hypodermic injection of morphine is a most effective remedy for the diarrhoea and cramps.

Cholera specifics do not exist. Oxygen, saline venous injections, chloride of sodium drinks, warm baths, calomel, camphor, venesection, have all failed.

Deafness in Syphilitic Tabes.

From *L'Union Méd.*, June 14, 1884, we learn that Dr. P. Hermet, in an article on this subject, draws the following conclusions:

1. Deafness in syphilitic tabes is due to a deep lesion.

2. Its evolution is very rapid, and it may be considered as a symptom of the preataxic period.

3. It is an element in making a diagnosis, and when one observes sudden deafness in a syphilitic, without apparent lesion, other symptoms of locomotor ataxia should be carefully looked for.

Scarlet Fever in Pregnancy.

Dr. Charles A. Leale thus concludes a paper in the *Med. News*, May 31, 1884:

Scarlet fever may attack the fetus in utero.

The large proportion of children born with scarlet fever recover.

Scarlet fever of the newly-born child has like manifestations as when it occurs later in life.

Scarlet fever may attack the woman during pregnancy, and also immediately after childbirth.

Scarlet fever is exceeding fatal to the woman during pregnancy and during parturition.

Scarlet fever rarely, if ever, affects the parturient woman if she has had a previous attack.

Scarlet fever causes death in the parturient woman by coma, exhaustion, or by convulsions.

Scarlet fever being a self-limited disease, is best treated by relieving dangerous symptoms, and in accordance with the rules of hygiene.

Scarlet fever only exceptionally occurs during the ages that women bear children; therefore, the proportion of those liable to contract the disease during pregnancy and childbirth, must necessarily be small.

Scarlet fever and septicæmia are distinct diseases, being unlike in many respects.

Sialorrhœa of Nervous Origin.

The Paris correspondent of the *Brit. Med. Jour.*, May 10, 1884, says that M. Gilles de la Tourrette furnishes an interesting observation of a case of sialorrhœa of nervous origin. The patient presented neuropathic antecedents. He was suddenly attacked by violent neuralgic pain in the cheek and maxillary region, which was quickly followed by an abundant flow of saliva, presenting all the characteristics of the parotid secretion; it was thready and viscous. The quantity excreted amounted to 1,200 grammes, exceeding the quantity excreted after administering a sialogogue. The seat of the pain was swollen, and presented a marked hyperæmic coloration, which increased or diminished according to the degree of pain. The saliva which escaped was almost exclusively of the parotid, which is never obtained in an isolated form by means of sialogogues.

Hæmaturia Caused by Retention of Urine.

Guyon, in the *Jour. de Med. et de Chir. Prac.*, states that long-continued retention of urine is always accompanied by a considerable venous congestion of the bladder, prostate, kidneys, and tissues around the bladder. When the bladder is

emptied rapidly and completely with a large catheter, the sudden diminution of pressure may cause ecchymoses in the mucous membrane, and sometimes abundant hæmorrhage, syncope, and death. In these cases, one-half only of the urine should be drawn off very slowly. It is a good plan also to inject into the bladder 150 grammes of a 4 per cent. solution of boracic acid, so as to prevent decomposition.

Permanent Pills of Permanganate of Potassium.

According to a correspondent of the *Deutsche Medizinal-Zeitung*, a Russian Pharmacist has hit upon an expedient for preventing the change which the permanganate is prone to undergo when made into pills. The formula is as follows:

R. Vaseline,	2 parts.
Paraffin,	
White wax, each,	1 part.
White bole,	3 parts.

The vaseline, the paraffin, and the wax are to be melted together, and when the mixture is cold, the bole is to be added. The permanganate of potassium is to be reduced to a fine powder in another mortar, and then added to the mass. The pill-machine used should be of horn or of wood.

CORRESPONDENCE.**Larvæ of *Cæstrus Bovis* in Human Skin.**

EDS. MED. AND SURGICAL REPORTER:

From the great rarity of the ova of the *cæstrus bovis* (gad-fly) being deposited into the human skin, and larvæ being developed, I consider the following case of interest to report:

The patient, an infant two weeks old, prematurely born at seven and a half months, being in a delicate condition, bottle fed, but thriving fairly well up to the time the nurse first noticed a swelling about half the size of an acorn on the anterior part of the neck; the same day, later, numerous similar swellings appeared in the same locality, posterior part of neck, chest, and between the fingers of both hands; the morning of the second day the centre of each swelling changed to a dark red; a few burst that evening, giving vent to a dark, bloody discharge, when the white grub could be seen making his way out; by the third day most of the swellings had opened, and out of each the nurse pressed out a worm, saying about forty in all were extracted.

I first saw the infant on the third day, when it presented a hideous sight: emaciated, jaundiced, and its neck, chest and hands perforated, each opening exuding a very foul-smelling discharge. I was able to press out of several openings the larvæ, and found them to be those of the gad-fly, measuring from $\frac{3}{16}$ to $\frac{5}{8}$ of an inch in length, and about $\frac{1}{8}$ of an inch in thickness.

The infant from the time of the first swelling

had considerable difficulty in swallowing, which increased; whether or not it was due to the same cause I am unable to say, as post-mortem was not allowed. It died the third day of the complaint.

The fly must have deposited its eggs directly through the skin, as there was no wound or abrasion of it, and from the fact that the larvæ were developed at distant points, it does not seem that the ova were introduced at all of the different points, but that either they moved, or the grub in the incipency of its development found its way to distant localities. A similar peculiarity is claimed to be possessed by the *filiaria medinensis* (guinea worm).

F. SHIMONER, M. D.

St. Paul, Minnesota.

NEWS AND MISCELLANY.

The Elk County (Pa.) Medical Society.

(Reported by SPENCER M. FREE, M. D., Secretary.)

The first meeting under our new officers was held at St. Mary's on Thursday, July 10. We were glad to welcome to our number three new members—gentlemen who have recently located in the county. There being no society in Cameron county, the jurisdiction of our Society was extended over that county.

Nearly all of our number not already members of the American Medical Association accepted the provision of the amendment to Regulation II, adopted at Washington in May last.

I mention this simply to let other societies of the State know how we stand on that question.

A matter of more importance to us individually and as a State, is the subject of a State Board of Health. Our Society unanimously adopted a resolution approving the "Pennsylvania Association for securing a State Board of Health." This subject has been discussed for some time by us, and we finally organized ourselves into a voluntary board of health for our two counties, to act, so far as we could, at the disadvantage of having no authority or means to enforce discipline.

We have a series of printed blanks similar to those of cities for the reporting of births, deaths, and contagious diseases. These reports are handed to the Secretary of the Society at each regular meeting. By this means we hope to collect valuable statistics, and to hasten the establishment of a State Board of Health. It occurs to me that if all of the societies of our State took similar action, it would do much good to themselves, their patrons, and for State sanitary legislation.

The announcement being made that Dr. B. F. Baer, of the University of Pennsylvania, expected to visit the county, a committee was appointed to extend him greeting and welcome, and to request an opportunity to show our hospitality.

An excellent essay, which elicited much discussion, was read by Dr. Hoffman. Subject: Exophthalmic Goitre.

The following cases were reported; some of them were present and were examined:

By Dr. Hartman—A case of obstinate granular ophthalmia. The treatment advised by the Society had also been advised by the doctor, namely "send him to a good specialist."

By Dr. Straight—A case of "wrist-drop," which was interesting because of its history and difficulty of finding the cause.

Dr. Free presented a man with double Colles' fracture. It is interesting only because of treatment. The left arm was put up in a splint, and the right one in adhesive plaster and muslin bandage, according to Moore. The result was better in the left arm. There is less deformity and more motion.

Two cases of disunited fracture of lower bones of the leg were presented. Dr. Hartman's case was of four months' standing. It had fallen into his hands only recently; having had very poor treatment before. A permanent dressing was advised and thought to be sufficient.

Dr. De Long's case had existed twenty weeks when he was called. The case then bore a history of necrosis, and removal of a few small pieces of bone. He put in a Pancoast screw. The man got well and walked on the leg for three months. He now has disunion at point of fracture, with further indications of necrosis.

Dr. Wilson reported a case of tetanus. Cause: Traumatism. It has been of five weeks' duration. At present, the patient is improved, and recovery is expected. During the early course of the disease, spasms were frequent and violent. Quinia and morphia were given freely—the morphia in large doses (from one-half to one grain each hour until spasms ceased). A pill containing strychnia and physostigma was used later in the disease, but with no apparent benefit. Now he is giving one-sixtieth of a grain of atropia every four hours during the day.

The subject of tamponing the vagina in cases of uterine hemorrhage was introduced, and occupied the rest of the time. Nearly all the members participated in the discussion. Cases were related of abortion and miscarriage, of placenta prævia, and of post-partum hemorrhage, in which it had been used.

Sponges, lint, cotton, ice, the colpeurter, and, in one case a Barnes' dilator, had been used. The general opinion was favorable to the tampon, especially in cases of abortion and of miscarriage. One of the members preferred sponges; the others the colpeurter. I was advised to not use it in post-partum hemorrhage, because we have better and more certain means of stopping it.

Some cases of interest to all were presented in this connection, but I shall not relate them, as I have occupied so much valuable space already.

The Plague in London, from De Foe.

In sending us this selection from De Foe, Dr. C. Vanderbeck considers that it may be of interest to the readers of the *REPORTER*, by reason of coming from the pen of the famed author of Robinson Crusoe, as well as the evidence plainly read in the lines and between the lines of our advance in these days in hygiene.

"It was now the beginning of August, and the plague grew very violent and terrible in the place where I lived; and Dr. Heath coming to visit me, and finding that I ventured so often out in the streets, earnestly persuaded me to lock myself up and my family, and not to suffer any of us to go out of doors; to keep all our windows fast, shutters

and curtains close, and never to open them; but first to make a very strong smoke in the room, when the window or door was to be opened, with rosin and pitch, brimstone and gunpowder, and the like, and we did this for some time; but as I had not laid in a store of provisions for such a retreat, it was impossible that we could keep within doors entirely. And here I must observe again, that this necessity of going out of our houses to buy provisions was, in a great measure, the ruin of the whole city; for the people caught the distemper, on these occasions, one of another, and even the provisions themselves were often tainted, at least I had great reason to believe so. However, the poor people could not lay up provisions, and there was a necessity that they must go to market to buy, and others to send servants or their children; and, as this was a necessity which renewed itself daily, it brought abundance of unsound people to the markets, and a great many that went thither sound brought death home with them.

"It is true people used all possible precaution; when any one bought a joint of meat in the market, they would not take it out of the butcher's hand, but took it off the hooks themselves. On the other hand, the butcher would not touch the money, but have it put into a pot full of vinegar, which he kept for that purpose.

"The buyers carried always small money to make up any odd sum, that they might take no change; they carried bottles for scent and perfume in their hands, and all the means that could be used were employed; but, then, the poor could not do even these things, and they went at all hazards. Innumerable dismal stories we heard every day on this very account.

"Sometimes a man or woman dropped down dead in the very market, for many people that had the plague upon them knew nothing of it till the inward gangrene had affected their vitals, and they died in a few moments; this caused that many died frequently in that manner in the street, suddenly, without any warning. Others, perhaps, had time to go to the next bulk or stall, or to any door or porch, and just sit down and die, as I have said before. These objects were so frequent in the streets, that when the plague grew to be very raging on one side, there was scarce any passing by the streets, but that several dead bodies would be lying here and there upon the ground; and in those cases, the corpse was always left till the officers had notice to come and take them away, or till night, when the bearers attending the dead-cart would take them up and carry them away. Nor did these undaunted creatures, who performed these offices, fail to search their pockets, and sometimes strip off their clothes, if they were well dressed, as sometimes they were, and carry off what they could get." * *

A Sanitary Patrol.

A most excellent idea is that provided for in the following order, issued by the Secretary of the Treasury, under date of July 19:

"In view of the presence of an epidemic of cholera, the existence of yellow-fever, and the Oriental plague, abroad, the safety of the public

health in this country demands the enforcement of rigid quarantine against the introduction of these diseases through vessels arriving at our ports. Therefore, in order to assist local authorities in the maintenance of quarantine as provided in Section 4792, Revised Statutes, the unrepealed portion of the act of April 29, 1878, and recent appropriation acts authorizing the President to maintain quarantine at points of danger, the President has determined to establish, by means of the vessels of the Revenue Marine, a national patrol of the coast of the United States, so far as it may be practicable under existing law, and consistent with the performance of the other duties confided to that service.

"You are accordingly directed to cruise actively with the revenue steamer ——— under your command upon the outer lines of your cruising grounds, and to exercise especial vigilance in speaking all vessels arriving from foreign ports, directing your inquiries, first, as to the port from which the vessel hails, and, secondly, as to the health of those on board at the time of departure, during passage, and at the time of hailing; and should the information gained indicate a condition of contagion and infection in the vessel or crew, or that the vessel has left a port at which contagious or infectious diseases were prevailing, her master will be directed to proceed for examination to the outer quarantine station provided for her port of destination.

"The following regulations will be observed relative to the inspection of vessels:

"If a vessel be found with sickness on board, or in a foul condition, she will be directed to proceed to the quarantine station hereinbefore indicated, and the revenue-marine officer will immediately notify the proper quarantine officer. In such case no person will be permitted to board the vessel until the medical officers in charge of the quarantine shall have given the usual permit.

"Should the pilot or master of a vessel when hailed report cases of recent or present sickness on board, the revenue officer will not board, but will send her immediately to quarantine.

"Quarantine officers will be recognized as follows, viz.:

"Medical officers or acting assistant surgeons of the Marine Hospital Service, in charge of Gulf, South Atlantic, or Cape Charles quarantines, or any officer of said Service, on duty at any port on the interior rivers or the Great Lakes; and all quarantine officers acting under proper State or local authority.

"Herewith is transmitted a list of the ports and places where contagious diseases exist at the date of this circular. This list will be amended from time to time and furnished by the Marine-Hospital Service for your information.

"Special regulations to aid local quarantine authorities will be promulgated hereafter, should occasion require."

The Transmission of Cholera by Rail.

The National Society of Medicine of Lyons has recommended the enforcement of the following rules for preventing the transmission of cholera by railway travel in France:

1. The Mediterranean system shall at once be

divided into two sections: that of contaminated districts, and that of non-contaminated districts. The point of division between them shall be that express station which, being situated in the non-infected district, is nearest the boundary.

2. Each of these systems shall have special cars, which shall not pass the point of division under any circumstances. The point of division shall be the place of transfer of all passengers leaving or entering the infected zone.

3. Passengers coming from the infected district shall be conveyed in cars reserved exclusively for them. These cars shall be placed at the rear of the train. The cars at the head of the train shall be reserved exclusively for way-passengers. Passengers of the two classes shall be strictly prevented from entering the cars which are not intended for them.

4. When the terminus is reached, the cars that have transported passengers from the infected district shall immediately be disinfected.

5. Baggage from the infected district shall be disinfected *en route*, by fumigation with sulphur burned in stationary pans in the baggage-cars.

6. Baggage-cars which are not transferred shall, in addition to the continuous sulphur fumigation on the way, be disinfected outside, at the point of division, with a solution of sublimed chloride of zinc, or some other powerful disinfectant.

7. Hand-baggage shall likewise be disinfected, at the point of division, by exposure to the fumes of sulphur for at least twenty minutes.

8. The baggage of a passenger attacked with cholera, or who has died of the disease *in transitu*, shall, on the arrival of the train, be subjected to a special and more thorough disinfection.

Disinfecting Toulon.

"Every means of disinfection at Toulon," says the *British Medical Journal*, "has been adopted. The city is watered with a solution of carbolic acid and chloride of lime. Those who have died from cholera are buried at a great depth underground. Railway travelers are sprinkled with carbolic acid solution. The soldiery are encamped outside the town. The sick sailors are put on board the *Entrepreneurs* to be examined; the cholera patients are removed to the St. Maudrier Hospital, which is reserved for them. The crews have been placed on vessels at anchor outside the port. The Ministers of War and the Marine have given orders to the authorities of arsenals to deliver to the civil authorities all the material for camping out that they may require. MM. Brouardel and Proust arrived on Tuesday, June 24, at Toulon, with a Ministerial decree to effect whatever measures they judge necessary for the public safety; to ordain the evacuation of entire districts, and of the city itself, if requisite. Dr. Rochaud left Paris for Toulon on Tuesday evening, also MM. Strauss and Rout, in order to continue their scientific researches. They are also commissioned to make a strict inquiry into the origin of the outbreak."

Lepers to be Put on Exhibition.

A unique variety of the moral show has been devised by a Californian, calling himself Dr. C. C. O'Donnell. He has secured two Chinese lepers,

with a large portfolio of photographs of other cases, and he proposes to travel East and exhibit them. The show is in the interest of anti-Chinese immigration. Dr. O'Donnell claims that there are between two hundred and two hundred and fifty lepers in San Francisco already, and that the disease is increasing. The police authorities of the various cities in which he proposes to exhibit his lepers, at the instigation of the health authorities, have wisely decided to prohibit the exhibition.

Dr. J. M. Ambler.

It will be remembered that Dr. Ambler was the surgeon of the *Jeannette* Arctic Expedition, who lost his life in the pursuit of science, and whose remains were brought to this country by Engineer Melville. A brass tablet has been prepared, to be placed in the village church at Culpeper, Va., bearing the following inscription:

"JAMES MARKHAM AMBLER,

"PASSED ASSISTANT SURGEON, U. S. NAVY,

"Died on the banks of the Lena River during the memorable retreat of the ship's company of the U. S. Arctic steamer *Jeannette*, in the year

—1881.—

"His sense of duty was stronger than his love of life.

"In memory of his noble example and heroic death, this tablet is erected by the medical officers of the United States Navy."

Items.

—There have been five importations of Asiatic cholera into this country, viz., in 1832, 1848-49, 1854, 1865-66, 1873.

—Yellow fever is reported to be prevailing on the Isthmus of Panama to such an extent that, together with an epidemic of dysentery, it has filled the hospitals both of the city of Panama and of Aspinwall.

—A grand fair in aid of the London hospitals is, it is said, to be undertaken under the auspices of the Health Exhibition. The hospitals in question are, many of them, in great need of pecuniary help.

—We learn from the "*Progrès Médical*" that a public subscription has been started in France for the purpose of erecting a monument to the memory of M. Dumas, and the Paris Faculty of Medicine will take part in the movement.

—Carci, experimenting upon dogs by trepanning and attaching a uranometer, finds that chloral, chloroform, ether, paraldehyde, and quinine, produce cerebral anæmia; morphine and nitrite of amyl, hyperæmia. Atropine in small doses has little effect; in larger doses it is rather an anæmiant.

—It is announced that the *San Francisco Western Lancet* is to be consolidated with the *Pacific Medical and Surgical Journal*, and that the joint issue will be edited by the senior editor of the *Journal* and the editor of the *Lancet*. An addition to the amount of reading matter is promised, together with other new features.

—F. Hebra's prescription for baldness is as follows:

R. Tinct. macis,	5 grammes.
Olei dulcis,	50 grammes.

M.

—Professor Virchow has begun a series of popular articles on cholera in *Die Nation*, a weekly political journal of Berlin. He condemns the French for carelessness, and takes a conservative view as to the real significance of the cholera bacillus.

—The Italian Ophthalmological Association, according to the "*Gazzetta degli Ospitali*," will hold its meeting this year at Turin instead of at Palermo, in order that advantage may be taken of the large attendance expected at the National Exposition.

—A congress of Polish doctors and natural philosophers took place at Posen, ending on June 4. There were three hundred present, some having come from Egypt, India, and other distant parts for the purpose. The next congress will be held at Warsaw or Lemberg.

—The editor of the *Peoria Medical Monthly* states that two patients who were recently operated upon by the Heatonian method died a few days afterward from tetanus. A third patient suffered severely from an extensive phlegmonous inflammation of the whole lower limb.

—Dr. William A. Hammond announces that he has four novels written, and intends hereafter to publish two a year. He states that he would rather be a novelist than a doctor, and thinks that it is time medical men, in a literary way, give some results of their rich and peculiar experience with human nature.

—Professor von Pettenkofer, of Munich, has written an article in the *Neuesten Nachrichten*, in which he shows that a bacillus or germ is not alone sufficient to explain the causation and transmission of cholera. There must be certain conditions of season and soil which favor development. These he calls the "local and time factors."

—The Summer Surgical Course at Kiel, as we learn from the *Medical Times and Gazette*, was opened with an address by Professor Esmarch, who concluded by calling for three cheers for the Nestor of German surgery, Von Langenbeck. On the same occasion he unveiled a bust of that surgeon and one of Stromeyer.

—Dr. William Fruitnight, one of the medical staff of Bellevue Hospital, died suddenly, July 21st, at the residence of his brother, Dr. J. Henry Fruitnight, from thrombosis of the brain. The deceased was but twenty-five years of age. He was graduated from the Bellevue Hospital Medical College in 1880, and since that time has been attached to the medical staff at the hospital.

OBITUARY NOTICES.

DR. CÆSAR HENRY HAWKINS.

Dr. Cæsar Henry Hawkins, the famous English surgeon, who had been Sergeant-Surgeon to her Majesty Queen Victoria for a number of years, died in London, July 21, 1884, at an advanced age. Hawkins was born near the close of the last century. After having served for a few years as lecturer on anatomy at the school in Great Wind-

mill street, London, he was appointed surgeon to St. George's Hospital, where he lectured on surgery, and rapidly became known as one of the most learned practitioners of Great Britain. He held this position for thirty-two years, in the meantime becoming a trustee of the hospital, until 1861, when he resigned and was appointed consulting surgeon, a post which he filled until his death. He was also for several years an Examiner in Surgery at the University of London, and a member of the Court of Examiners of the Royal College of Surgeons, of which he was twice elected President. In 1849 Dr. Hawkins was chosen to deliver the Hunterian oration before the College of Surgeons on an occasion when the late Prince Consort honored the college by his attendance. He also served at different times as President of the Royal Medical Society of England, the Royal Chirurgical, and the Royal Pathological Societies. On the death of Sir Benjamin Collins Brodie, Sergeant-Surgeon to her Majesty, Dr. Hawkins was recognized as the foremost surgeon of Great Britain, and as such was appointed to fill the vacancy in the Queen's household. He was the author of a series of lectures on tumors, published in the *Medical Times and Gazette*, and furnished a great number of other valuable contributions to that publication, as well as to the *Lancet*, and other medical journals.

QUERIES AND REPLIES.

EDS. MED. AND SURG. REP.—

Will you please answer through the REPORTER the following: What is the best treatment constitutionally and locally for a continued series of small furuncles or boils in a well-nourished non-anæmic patient? M. S.

Vesta, Neb.

MARRIAGES.

ATKINSON—SNOW.—In Conway, N. H., by the Rev. F. A. Bragdon, Leonard W. Atkinson, M. D., son of the Rev. K. Atkinson, of the New England Conference, and Miss Isabel Snow, daughter of E. Snow, Esq., of Eaton, N. H.

McCLELLAN—PEARS.—In East Liberty Presbyterian Church, June 26, 1884, by Rev. Edward P. Cowan, D. D., Dr. James H. McClellan and Rachel May Pears, all of Pittsburgh, Pa.

NEWLANDS—BURDICK.—At the residence of the bride's parents, 581 Westminster street, St. Paul, Minn., July 8, 1884, Dr. George Newlands, of Litchfield, Minn., and Miss Lizzie Burdick.

SNIDER—BACON.—In Louisville, Ky., July 10, 1884, Dr. T. A. Snider, of Sacramento, Cal., and Mrs. Chas. Bacon, of Louisville.

DEATHS.

ADAMS.—At Liverpool, England, June 19, 1884, John G. Adams, M. D.

CHILDS.—At the residence of his sister, Mrs. Lucy A. Kneeland, 578 East 145th street, New York city, July 21, 1884, Samuel Russel Childs, M. D., aged eighty-four years.

FRUITNIGHT.—In New York city, Sunday, July 20, 1884, suddenly, Dr. William Fruitnight.

MORGAN.—In Bennington, Vt., July 20, 1884, of apoplexy, Dr. E. N. S. Morgan, aged fifty-eight years, six months, twelve days.

RUGGLES.—In New York, July 18, 1884, very suddenly, Dr. Dwight Ruggles.

STANLEY.—At Wrentham, Mass., July 11, 1884, William S. Stanley, M. D., formerly of Mamaroneck, N. Y., aged eighty-one years.

TAYLOR.—At Newark, N. J., on Friday, July 25, 1884, Dr. Samuel W. Taylor.